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WILDLIFE IN NORTH CAROLINA

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Federal agents display a collection of illegally taken egret plumes. The plumes would have been shipped by rail to market. **PHOTOGRAPH BY H.B. THRASHER, CA. 1930.**

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Cover: In May the woods and fields of North Carolina are home to the sights and sounds, especially the sounds, of male Eastern wild turkeys in search of hens. PHOTOGRAPH BY RALPH HENSLEY.

Wildlife in North Carolina is the official educational publication of the North Carolina Wildlife Resources Commission. It is dedicated to the sound conservation of North Carolina's wildlife and other interrelated natural resources and also to the environment we share with them.

EDITOR'S NOTE

Once someone exclaimed to me, most certainly in a fit of exasperation, "You never were a little boy, were you? You were born an old man."

I disagree with that, at least a bit, but ever since I was a child I have loved the old and antique, particularly if the old things or old ways happen to work just as well today as they did long ago. A 150-year-old dining table functions just as well now as when it was new. That admiration of beautiful forms and their histories partially explains my love of soft hackle flies, but it's their utility that I'm interested in most when fishing. An angler can fish them from the surface film (or even on the surface) all the way to the bottom of a stream. It's easy to fall in love with something that is simple and works.

NEIL NORMAN

"Soft hackle" is a relatively new term, introduced by British angler and writer Ewen Todd in 1903, for a fly whose lineage can be traced back more than 500 years. Historically the flies had been called simply "hackles" until Scot William C. Stewart wrote about them as "spiders" in the mid-19th century.

The flies of the English North Country and Scotland were and are the simplest of creations—a little thread and the feather of land birds indigenous to the area. They've not changed much to this day—a couple of wraps of thread and a turn or two of hackle and you're done. Occasionally other materials, such as peacock herl or wire, may enter the recipe. Sylvester Nemes, who has championed the use of soft hackles in several books, refers to these flies as "simple, sober and ancient patterns." Nemes' assessment is as economical and beautiful as the flies themselves.

Neil Norman, author of "North Country Angling for Southern Appalachian Trout" (p. 10), explains soft hackles, their history and their use in much more detail. And, as Norman says, they do work exceedingly well in our own trout waters.

The partridge and orange was the first soft hackle I ever fished, and in the words of Stewart, it is a "killing" fly. My fly box is filled with soft hackles, and I feel comfortable fishing them. If I can't figure out what's occurring on a river (an all-too-common state of affairs), I turn to a soft hackle most often and feel confident.

It's as Harry Middleton wrote: "As long as there were fur and feathers and colored thread, there were hope and possibility and excitement—the chance of success."

Jim Wilson

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The Inspiration of Flight

I read with interest the article by Christine Kelly on "The [Golden] Eagle has Landed" (March–April 2014) and the accompanying Nature's Ways page on the eagle's primary wingtip feathers. I am an artist who has had a long association with *Wildlife in North Carolina* since doing covers in the 1950s, numerous calendars and articles through the years.

I have also had a very long interest in flight and the natural flight of birds and butterflies. This interest lead me into recently designing and building an actual size radio-controlled red-tailed hawk which utilizes the primary feathers seen in soaring eagles and hawks discussed in your articles.

It may be of interest that many airplanes have a positive incidence (angle) at the root of their wings, and a negative incidence (angle) at the tip of their wings to lessen the tendency to stall at slow speeds. Eagles and hawks also have this negative incidence in their primary tip feathers; this can be seen in photographs of these soaring birds. I have used this in my design of the hawk shown in the accompanying photographs. This project was recently finished, and I plan to try and fly the model hawk in the spring. Until that event, I do not know if it will be successful because no man-made object can have the exquisite muscular control of a flying bird or insect. After all, how many birds have you seen crash?

One of the reasons for my project is the fact that hawks are territorial, and I am hoping to get video of hawks attacking this model. The model has been featured recently in two national model magazines. I have built it as scale as best I can, and it is the actual size of a red-tailed hawk (54-inch wingspan). The model is basically balsa wood with Japanese silk covering and hand-painted with acrylic artist paints. We have many red-tailed hawks in the Kinston area, and they regularly take squirrels from our yard. When I took this model outside to photograph it, all the birds and squirrels left our feeders. Only the blue jays started to fuss at the model (from a distance).

I have also designed and built a radio-controlled 23-inch cloudless sulphur butterfly which I hope to startle the neighbors with by flying it into their yards. Our garden is full of the actual size sulphurs, but a big one may grab their attention.

Bob Dance
Kinston

While kayaking on Roanoke Rapids Lake this past fall, I happened on a pair of large eagles resting on the old railroad pilings that cross the lake at Voltaire. Though we have a healthy population of bald eagles there and at Lake Gaston, these were too large to be immature baldies. Probably not wintering here, but it was interesting to note that golden eagles do winter as far East as the Delmarva Peninsula.

Tony Moran
Littleton

Jack Dermid 1923–2014

The passing of Jack Dermid has left those who appreciated his great talent with a feeling of loss and appreciation of his life. As a young man in the 1950s I would marvel at his black and white images of animals on the pages of *Wildlife in North Carolina*. His knowledge of nature was apparent, and he had the great talent to translate that knowledge into great photographs.

I particularly remember a beautiful black and white photograph he made of a green snake in all its rhythmic beauty. He had the rare talent of knowing exactly when to trip the shutter at the precise moment to capture a subject in an interesting attitude and blend it into a beautiful composition.

I feel that his photography was a large factor in making *Wildlife in North Carolina* one of the premier state magazines early in the history of the magazine, a tradition that continues to this day. He leaves an album of work that will not be forgotten by those who have turned the pages of this magazine over the years of its publication. We will miss you Jack.

Bob Dance
Kinston

Editor's Note: Jack Franklin Dermid died March 24 at age 90. He began working for the magazine in 1950 as a photographer and managing editor, but had contributed to Wildlife in North Carolina *as early as 1944.*

Jack came to work for the magazine and the Wildlife Commission in 1950, serving as the magazine's photographer and managing editor. He and well-known wildlife artist Duane Raver began their careers in the same year. Jack left in 1962 to teach biology at the University of North Carolina at Wilmington. Through the years, Wildlife in North Carolina *has continued to use Jack's photographs. In fact, there is one in this issue, on p. 22, of a yellow-crowned night heron. Jack's work will be featured in the July–August issue of WINC.*

We want Your Feedback

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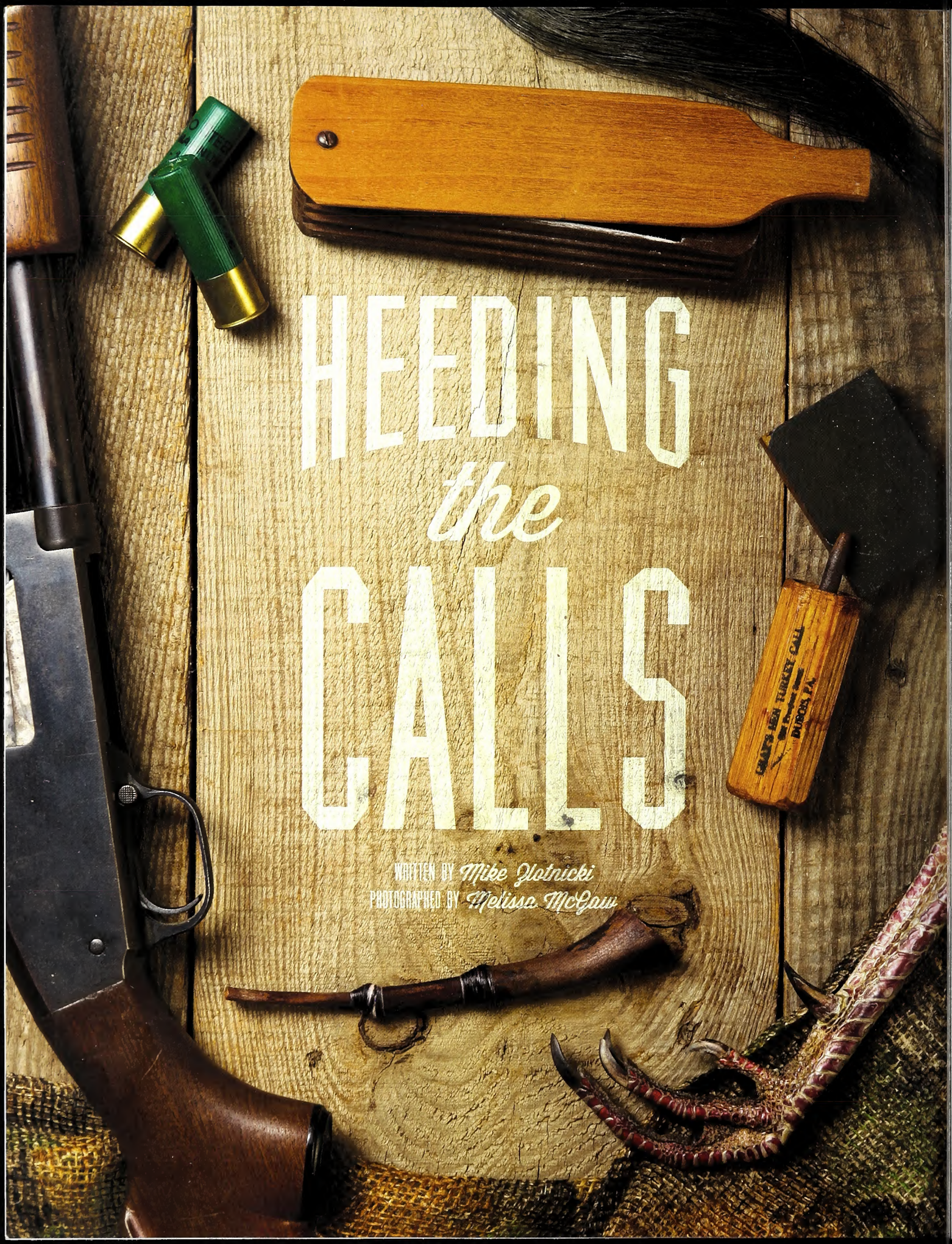

HEEDING *the* CALLS

WRITTEN BY *Mike Jotnicki*
PHOTOGRAPHED BY *Melissa McGaw*

Some turkey hunters have turned collecting calls into a passion all its own.

Ken Mummert sits in the small room on the third floor of his Wake Forest house. A pronghorn shoulder mount stares down from one wall. A body mount gray fox is on the other side of the room, while a mounted crappie and a drake mallard hang on other walls. There's a gun cabinet against a wall with mostly shotguns in it. There's even a turkey call CD on a boom box. It definitely qualifies as a man's man cave.

Against one wall there's a display with a couple of dozen box calls on the shelves and next to it stacks of cartons and boxes. A visitor asks why they're seemingly on display.

"Overflow," Mummert says with a laugh, and points to the cartons and boxes, all filled with various turkey calls.

Mummert has been an avid turkey hunter since his teenage years in Pennsylvania. Today, the tools of his hunting passion, simple wood and bone instruments, have turned into a new passion all together. The possessions became an obsession and Mummert is one of the stalwarts in the world of turkey call collecting, having been in the game since the late 1970s.

Mummert "gets it honest," as we say in the South. His father was the president of the local gun club. One uncle served in the Pennsylvania Game Commission. His father also owned a turkey hunting specialty wholesale business in Pennsylvania, LM Sporting Goods, distributing camouflage socks, hooded t-shirts, handkerchiefs and calls, as well as region-specific shirts, hats and patches. He also sold calls handmade by his brother and a rebranded slate call made by the famous Neil Cost. A big seller was a patented 'make your own' diaphragm call kit.

Mummert was introduced to turkey hunting by his uncle Lee Mummert, who Ken credits as his greatest influence in turkey hunting, instilling such basics as full concealment, not over-calling and patience.

In his youth Mummert spent hours upon hours in his basement assembling Uncle Lee's Diaphragm Call kits after school. It was his after-school job. "Dad died when he was 49," Mummert says wistfully. "He was living the dream."

Mummert, 51, who works in commercial printing, and two other men, Craig Koefler, 66, of Raleigh and Jason Booser, 36, of Franklinton, originally "met" on Internet forums and eventually met in real life. Mummert (whose board "handle" is NCBigShot) and Booser (Turkeyfanatic) discovered on the forums that they had a lot in common and eventually met and developed a friendship, while Mummert and Koefler (Longbox) had been friends for a while after connecting on eBay and meeting at a local gun show.

Booser, an elementary school teacher, got into trumpet calls through some hunting friends who piqued his interest in them. He differs from the others in that he collects from one maker and one type—the trumpet call. A native of Brookville, Pa., he moved to North Carolina in 2004. His first custom call was a $65 call made by Ted "Pete" Peters of Ohio.

"I was looking for a call that took a little more effort and dedication," he said. "It's a challenge. It was frustrating at first but I stuck with it."

Eventually, Booser got bit by the collecting bug and discovered trumpet call-maker Herb Hornstra of Eugene, Ore.

"Resale value, artistry is phenomenal, everything is handmade—not machine made," says Booser when asked what drew him to Hornstra's calls. "The playability. With a trumpet you have to draw air in. With a mouth call you push air out. It was the easiest call when I put it to my mouth to perform all of the vocalizations of the wild turkey. I can take them to the woods, hunt turkeys with them and get them made in just about any material you want to have them made in. I have nine of his calls."

Some old tools of the trade from Ken Mummert's collection. The box call is a South Mountain by David A. Snider of Fayetteville, Pa. At right is a Gray's Hen Caller, an early peg-and-slate call made by Sherman X. Gray of Duboise, Pa. Bottom is a wingbone yelper dyed with walnut hulls, maker unknown.

According to one reference book, the Hornstra calls can start at a couple of hundred dollars each. Does Booser fear hunting with them?

"I'm very careful," he says. "I have some custom-made leather cases that go around my neck, and it's going to take a pretty good fall or something for them to break. I'm not going to lie; there're a few that I wouldn't take into the woods. It doesn't matter what they're made of or the price behind them, they'll all kill turkeys and they will all speak the turkey language. I use these Hornstra calls probably 80 percent of the time."

In his view, an antique call is probably at least 50 years old and is often a production call made with the use of machines. Lohman, Herter's, and Penn's Woods are examples of call companies, many of which are no longer in business.

Koefler, of Raleigh, is retired from Delta Consolidated Industries and now spreads time between a gig at N.C. Hunter Supply, cooking for his wife, helping run a hunt club and a bass club, and collecting calls. He has about 15 years of "serious" collecting. But his story has a Mustang in it.

"Back in the '80s and '90s I had the notion to restore a '69 Mustang," he recalls. "I went to every pole barn in eastern North Carolina to find one. I knew how much money I was going to put in it. Then I found calls and redirected from the Mustang to calls. I've ended up spending more on calls."

His start was like many others. "I bought a turkey call on eBay and that's how it started, he says. "It was a Roy Wilson wingbone for $20. I used eBay as my learning tool to see what people were buying and what people were paying. Then I met people like Ken Mummert and Tony Gallo in Memphis. Then I found an online forum, Custom Calls Online."

Later, Koefler helped spin off some forum readers to form the Custom Call Collector Guild that "met" on conference calls. Since then he's become disillusioned with the message boards due to the "backstabbing and anti-social behavior."

Koefler collects all types of calls, but has more box calls than other types. He's not in it to make money, rarely sells a call and has about 600 at any one time. At first he collected production calls from Olt, Lohman and Quaker Boy. Now he tries to collect good examples of individual custom calls.

Koefler buys both playability and aesthetics, but says that some pretty calls "sound like crap."

His advice for newbies: "Read some reference books. Check eBay," he says. "The National Wild Turkey Federation Convention in Nashville is probably the best place to see current call makers and purchase calls. It's not a cheap proposition. It can run anywhere from $75 to $5,000. I know of one $35,000 private transaction."

Koefler's most cherished call is one made by Archibald Rutledge, former poet laureate of South Carolina and prolific author. He found it online and paid $50 for it. Rutledge named and signed all of his calls and this box call was "Delila," signed A. R. It's been appraised at $5,000. Is it for sale?

"Hell no, I won't sell it!" Koefler scoffs.

He picks a Neil Cost box call as another favorite, one worth about $1,300.

Mummert classifies calls into loose categories such as antique, investment, decorative or type specific.

In his view, an antique call is probably at least 50 years old and is often a production call made with the use of machines. Lohman, Herter's, and Penn's Woods are examples of call companies, many of which are no longer in business.

Mummert said that when he moved away he wanted to reconnect with his hunting heritage in Pennsylvania. To that end, he started collecting calls he grew up hunting with, like the Penn's Woods and the Lynch calls. Eventually, he says, he learned that these were not just pieces of nostalgia, but investments as well. He then bought the Earl Mikel book and learned more about the makers. He spent most of the '90s buying calls and started to sell some in the 2000s.

When asked about North Carolina makers, Mummert mentions Fred Cox of Reidsville (Grand Slam Turkey Calls) as one of the finest. One of his specialties is a custom three-bone yelper crafted from a wing you provide, complete with your bird's stats.

Another is Jonathan Payne of Asheville, a violin maker by trade whose push-pin calls are "deadly in function and beautiful in appearance," Mummert said.

Michael Buckner of Forest City makes trumpet calls and crow calls and is a National Wild Turkey Federation call contest judge as well.

Mike Battey (aka the Call Dr.) of Pineville owns Wildtalker Calls and is also known for innovative components that large companies utilize in their calls.

Mummert says Dave Hagerman of Rolesville isn't as well known as some but will be sooner rather than later for his friction and box calls.

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From top to bottom: Tony's Turkey Talker made by Tony's Work Shop from Austin, Pa. Next is a nesting scratch box call from T.Z. Williams and Son in Flemington, Pa. Herter's Model C–102 peg and slate call from Waseca, Minn. Left is an M.L. Lynch Model 101 Fool Proof box call from Birmingham, Ala. Bottom is a Stevenson's Model 430 Deluxe Turkey Talker out of Wellsboro, Pa.

These are two examples of trumpet or yelper calls. The smaller call is made of cocobola wood and horn and is a B.G.I. Yelper from Bridgeport, Conn. Next to it is an early Penn's Woods Roger Latham trumpet call made from original Turpin components from Jason Booser's collection. Opposite page is an E.G. Chalkley's push-pin caller from Suffolk, Va.

Mummert doesn't mention it, but he himself makes pretty nice cane yelpers and sells them.

Investment calls are just that. There's money in calls if you want to play that game. The day after interviewing Mummert and Booser, a Gibson box call sold on eBay for $25,000. That's a good bit of scratch. Neither Mummert nor Booser has ever lost money on a call they have sold. "You have to be savvy and you have to know what you're buying," Mummert says. By his own estimate he's bought about 1,000 calls over the years and sold about 300 or so. Personally, Mummert doesn't consider himself a trader. He has 600 to 700 in his collection.

Sentimental calls, for Mummert, are calls made by his family members and old Lynch box calls. He picks up an old Lynch Fool Proof as an example of a sentimental favorite. His Uncle Lee copied the design for one of his calls. "He likes to think he improved it," Mummert says with a chuckle. He pulls one from a drawer and shows an example with nicer wood—curly walnut—than the Lynch.

Decorative calls are often beautiful and functional, but not always. Box turtle shells are an example of a slate call component that can be painted. Mummert reaches in to one drawer and pulls out a round friction call with the top of a turkey tail feather under the clear surface. Painted on the feather is a gobbler in full strut. It seems too pretty to hunt with, but it's fully functional.

Every collector seems to have a favorite story about a call, and Mummert is no different. "My favorite turkey call is a small wood and horn yelper made in the late 1800s by a company called the Bridgeport Gun Implement Company (BGI) of Bridgeport, Conn.," he remembers. "This particular call is highly valued in the world of collectors for its age and scarcity. I happened to be cruising eBay one evening and noticed one for sale by a fellow who mistook what it was for a vintage cigarette holder. I ended up purchasing that call for a whopping $10 plus shipping. On average these BGI yelpers (when properly identified) will sell on eBay for anywhere between $400 to $800, depending on variation and condition. So, yes, I was thrilled at the purchase and the luck I had finding this treasure."

In the collecting world, Mummert says many shy away from production calls and concentrate on custom calls. He doesn't. "I think many of the older mass-produced calls are iconic," he says. "There are such a variety of calls from makers who are no longer in business. These Herter's calls, they quit making them years ago but they're highly collectible."

Getting a call in the original box with instructions can sometimes double the value of the call, no matter how bad the condition of the box is. Provenance calls—those that have a letter of authenticity, are more valuable than those without.

"Once I get a custom call, I know what I'm getting when it comes to sound quality," says Booser. "If I don't like that sound quality, nine times out of 10, I can call the call-maker back and he's going to send me something else back or try to fix it. If I go buy a packaged call... I could buy three Lynch Fool Proofs and get three different sounds."

"Age, packaging, graphics on the call, things that make it look special, those add value," says Mummert.

Like anything else, call collecting has a learning curve. Mummert has some advice for the inexperienced collector.

"Many newbie collectors start out by collecting every call in sight," he says. "That may be a good way to start building a collection, but eventually many collectors start to focus their sights on a particular type of call—box calls, trumpet, etc. or calls from a specific source, a favorite maker, production company, or region of origin. In any event, when buying to collect, try to buy calls in the best condition possible, and preferably with original packaging or maker's provenance."

Mummert says many older calls were never signed by the original maker, making it difficult to validate their authenticity. These unknown (or no-name) calls are often diamonds in the rough that could be significantly more valuable if you were able to trace their origins and obtain some actual documentation of authenticity.

When starting to build a collection Mummert highly recommends creating an inventory spread sheet documenting crucial information such as maker, model, vintage, special notes, date of purchase and purchase price.

"I have kept a running inventory in this manner for about the last 10 years and it has come to be a valuable resource in determining values, dates and place of manufacture for a variety of calls," he says. "It's through this method I've been able to discover an array of variations particularly in vintage production calls. Believe me; it is better to start one of these when you're starting to collect, as opposed to going back and documenting a couple hundred calls and guessing how much money you put into the collection."

Mummert says to not be afraid to contact a call maker or call company to ask questions.

"I have gleaned a lot of information over the years by personally calling or emailing companies such as M.L. Lynch, Quaker Boy or Primos to ask about obsolete makes of calls," he says. "By doing this I've been able to learn what years an older call was produced and the number of calls produced. You may not get all the answers, but for the most part everyone I have dealt with over the years gets a kick out of talking about the older calls."

Mike Zlotnicki is the associate editor of Wildlife in North Carolina. *He may be reached at 919-707-0175 or at mike.zlotnicki@ncwildlife.org.*

Ken Mummert's list and commentary on

FAVORED TURKEY CALL REFERENCE BOOKS:

"Turkey Callmakers Past and Present: Mick's Picks" (1994), Earl Mikel: In 1994 Pennsylvania native Earl Mikel published his first book on call makers and arguably caused the greatest boon in the call-collecting world. A bible, if you will, covering the history and details of the bulk of the greatest names in the call-making world. Since this book is only available in its original printing it is now considered rare and highly collectable.

"Turkey Callmakers Past and Present—The Rest of the Best" (1999), Earl Mikel: Mikel's second book picks up where the first left off, covering the biographies and details of more notable call makers. Once again, only available in its original printing, and highly collectable.

"Longbeards, Callmakers and Memories" (2005), Earl Mikel: Mikel's last book in which he blends his anthology of call makers and their wares with his personal goal to hunt a turkey in every state of the U.S. using a custom built call by a call maker native to each state. Earl succeeded in accomplishing this goal and included hunt stories in this book. These books were produced in higher volumes than the first two and are more accessible to call enthusiasts, but are certainly going to increase in value and scarcity. Mikel passed away in 2007.

"Turkey Calls, An Enduring American Folk Art" (1994), Howard Harlan: An excellent resource book covering more than just call makers. Howard Harlan literally covers the history of the turkey call in the U.S. Special emphasis on the earliest innovators, from Native Americans utilizing wild turkey wing bones to the first makers of friction and box calls.

"Neil Cost; Magic with Wood" (2004), Michael F. Marks: A pictorial anthology and tribute book to the call-making mastery of Neil "Gobbler" Cost. The book features beautiful photography of the gamut of calls produced by Cost, from his earliest works to his crescendo call, "The Fat Lady."

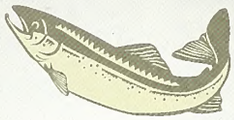
"2013 Turkey Call Collectors' Guide; Calls, Call Makers, and More" (2013), George Denka: This book by South Carolina native George Denka was compiled as a resource guide for call collectors. Based on observed selling costs on eBay and at NWTF auctions, Denka includes a scale for collectability and low to high price ranges for calls and turkey hunting related books.

"Today's Call Makers Keeping The Tradition Alive: Made in America" (2013), John D. Hood II: Hood compiled his book to cover current duck and turkey call makers. Many new call makers previously undocumented are in this book, but there are a few familiar faces as well. Hood's purpose in this book was to showcase only call makers that do not mass produce or use computerized technology to produce their calls.

Mummert and Koefler referenced these websites as popular with call collectors.

- oldgobbler.com
- osageroost.com
- grandslamnetwork.com
- wildturkeyzone.com
- customcalls.com

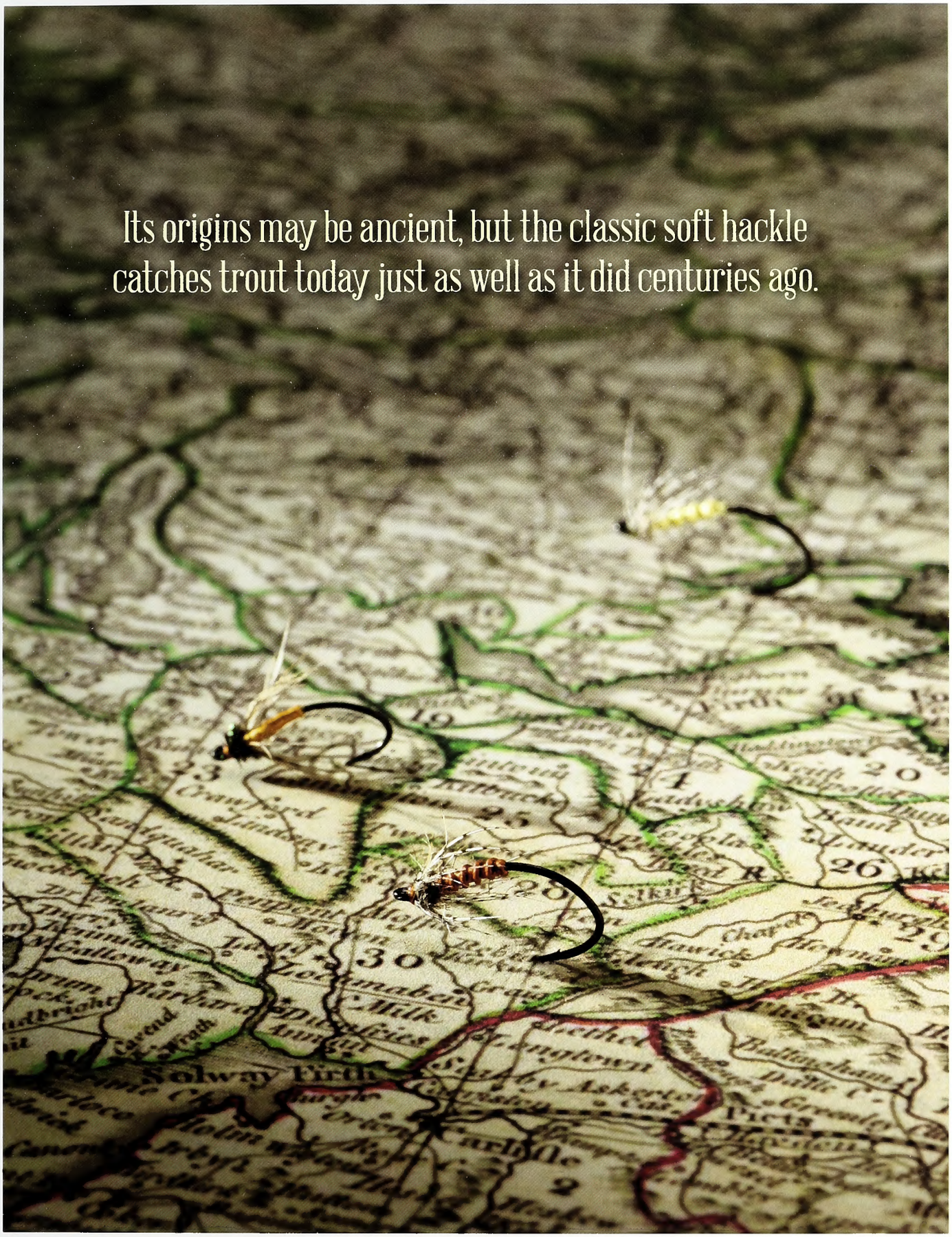
North Country Angling



for Southern Appalachian Trout

written by Neil Norman
photographed by Melissa McGaw

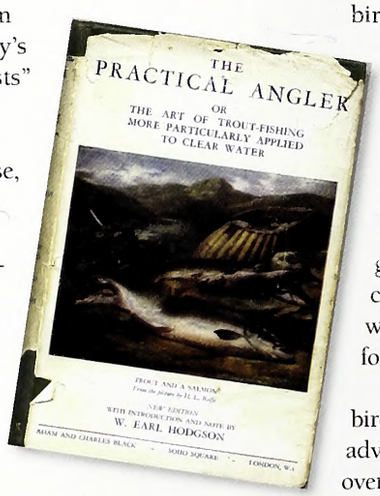
I wind brown silk up the shank of the hook and tie it off just behind the eye, select an iridescent blackish-purple hackle from a starling's shoulder, tie in the tip, wind the feather around the shank twice (exactly twice) and tie it off. In the early season this little fly will pass for a stonefly; a month or so later and on a smaller hook, a caddis pupa. It will suggest something terrestrial during dog days. Only the trout knows what. I whip finish and lacquer the head of the fly—the Black Spider—the "most killing imitation" that Edinburgh attorney W.C. Stewart claimed he ever fished. Stewart often gets credit for originating the Black Spider because he wrote about it first, but he acknowledged that James Baillie, another Scottish angler, introduced him to it. Whoever taught Baillie to dress the Black Spider is impossible to know now.


Its origins may be ancient, but the classic soft hackle catches trout today just as well as it did centuries ago.

What is most telling about the fly's lineage is not its association with some famous angler or guide who created it, branded it and sold it. That is the modern way. The origins of the Black Spider are instead most evident in its simplicity. Its sparseness harks back to an angling heritage that first flourished time out of mind on the burns and lochs of the Scottish Uplands and farther south, on the Lake District tarns and on rivers like the Ure, Border Esk, and Wharfe that brawl through the stony North Country dales of England. Their names might be unfamiliar, but the setting cannot be entirely foreign to anyone who knows the pastoral wash of the New River or the force of the Oconaluftee draining the crags of the Great Smoky Mountains. In Southern Appalachia anglers dappled bushy flies palmered with hackles from local birds, most famously the yellow-shafted flicker or "Yallerhammer," as our highlanders put it. The North Country tradition might easily be the home of our own traditions. Anglers there paired slender bodies with the hackles of their native game birds to create the flies that have attracted wild Yorkshire and Scottish brown trout for centuries. What worked for North Country trout will also work for North Carolina's trout.

As much as anglers pay homage to tradition, we are fascinated by passing fads. Sometimes these fads become innovations that end in accepted convention. Monofilament made soaked silkworm gut obsolete. Fiberglass supplanted bamboo until graphite pushed them both aside. A mid-nineteenth century fad began with a small group of anglers in southern Britain whose method intentionally challenged the Northern tradition. These new dry fly anglers—"purists," as they liked to call themselves—decreed that the floating fly fished upstream to clear rise forms was the only sporting way to take a trout. It was a more genteel method, they argued, more challenging, more ethical, more scientific and infinitely more effective for catching trout than fishing a fly wet. Their claims were just different ways of saying they wanted to innovate angling everywhere with an approach best suited to their Hampshire streams, where languid currents rise from springs that filter through underground chalk, interlacing themselves into ripples that unravel into clear, deep channels, gliding over sandy bottoms and swelling around weed beds so dense they must be pruned seasonally. There mayflies can work themselves free of their nymphal shucks slowly, and trout can sip them casually off the top of the water. There, too, dry-fly anglers began to cast floating flies upstream on long lines to mimic the labors of the hatching mayfly caught in the surface film of the river.

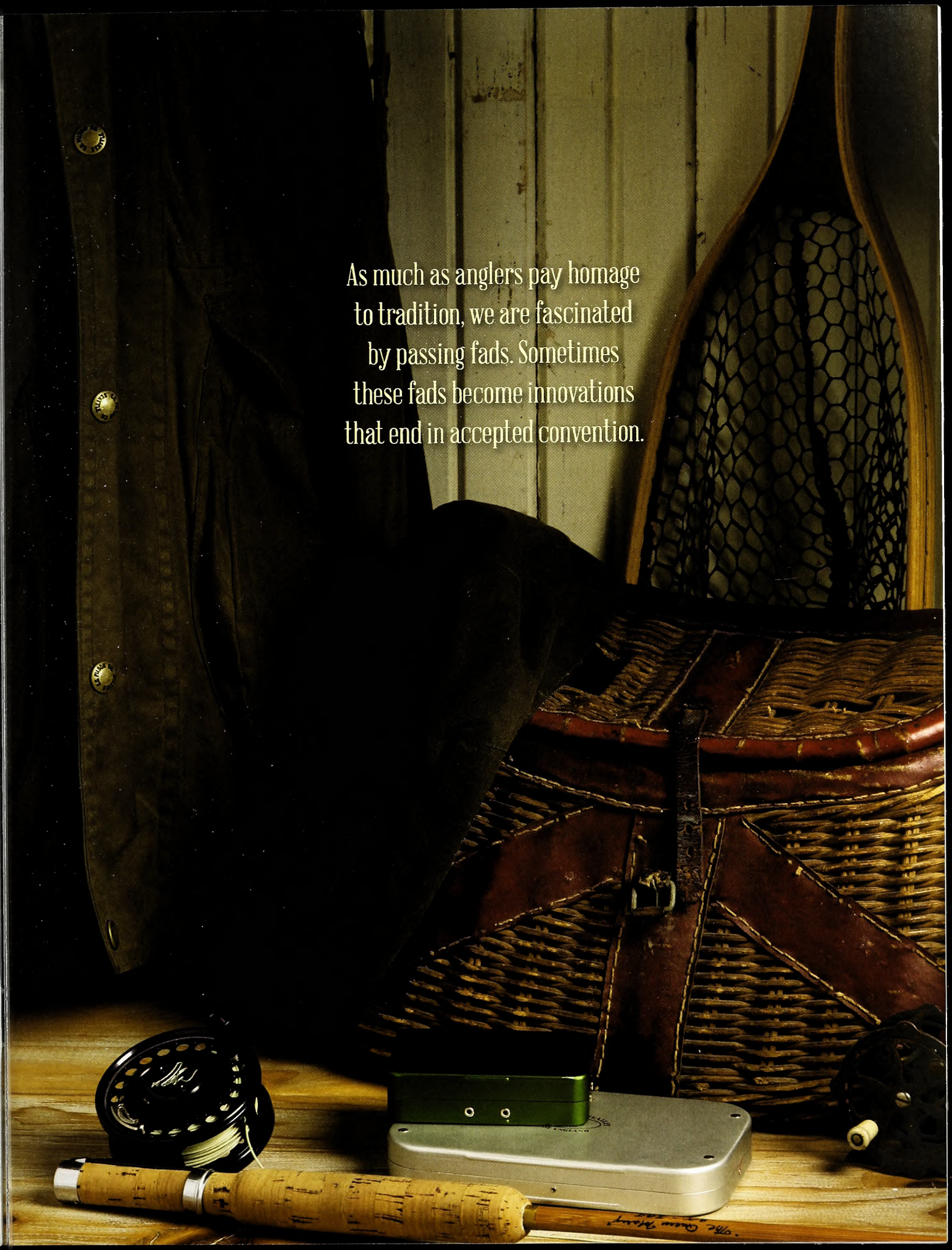
But the tactics of the North Country anglers were no less tailored to the rigors of their waters, where rivers shoot past gray boulders, course white into wide pools, and trace a riffled track over cobbled river beds. Unlike the gin-clear chalk streams of Hampshire, North Country streams swell and discolor after a spate, like freestone creeks in North Carolina, reshaping the habitat for a host of insects, mostly stoneflies. As a consequence, North Country trout are somewhat more opportunistic than their southern cousins, but they still respond best to flies that seem familiar, to dressings that could share the river with them as living insects. Dry-fly anglers in southern England dismissed the North Country spiders and techniques as provincial, but their favorite fishing beats were an easy train ride southwest from London, the country's center. These "purists" deemed the North Country tradition less sporting because, they argued, it was less challenging for the angler: Yorkshire flies were not invested in the sort of exacting imitation as floating flies, and anglers' willingness to present flies downstream was crude and unbecoming an accomplished fisherman. But to brand the Yorkshire anglers who touted the soft hackle in the 19th century as backward was to misunderstand them, their tackle and their techniques entirely. Two authors in particular, W. C. Stewart and T. E. Pritt defended the North Country tradition against the 19th-century dry fly. Their defense then still recommends the soft-hackled fly for anglers now.



William C. Stewart's "Practical Angler," written more than 150 years ago, remains a seminal work on fishing with soft hackles.

Southern English anglers argued that their chalk streams naturally bred more selective trout. Since their trout got a long look at the rising mayfly, those anglers advocated dressings that would imitate specific insects as realistically as possible, which required the angler to be a sort of gentleman-naturalist who dressed patterns informed by careful observation of the hatch in its subimago and imago stages. The attempt at precision that defined their imitative ends, and which remains with us today, made a broad stock of local and foreign fly-tying materials necessary. Their home was not only the center of the country, after all, but also of the British Empire. Their fly-tying supplies had cosmopolitan associations. One of their favorite hackles was the scarce, blue Andalusian cock from Spain, a Mediterranean fowl that provided glassy, dun hackles. They also used the feathers of exotic birds like the Cochin chicken and greater adjutant stork that were both becoming increasingly available through British trade with Southeast Asia. Their choices in hackles marked a departure from the mainstays of North Country soft hackles. Red grouse, partridge, snipe, dotterel, coot and other local birds became winging, no longer the traditional foundation of a suggestive dressing.

Nevertheless, these common landbird hackles offered specific, imitative advantages for North Country insects over the overly-complicated imitations of the dry fly anglers. T. E. Pritt outlined the benefits in his "Yorkshire Trout Flies" (1885), before republishing the book a year later with a more inclusive title,



As much as anglers pay homage to tradition, we are fascinated by passing fads. Sometimes these fads become innovations that end in accepted convention.

Two traditional North Country soft hackles, Michael Theakston's Spiral Brown Drake (top) and T.E. Pritt's Dark Snipe are as effective today as they were in the 19th century. Norman tied these flies on sizes 16 (top) and 18 Gamakatsu C13U dry-fly hooks.

"North Country Flies" (1886). It remains the defining text of the North Country style. Pritt explained that trout "undoubtedly take a hackled fly for the insect just rising from the pupa in a half-drowned state; and the opening and closing of the fibres of the feathers give it an appearance of vitality." The softness of the hackle gives life to the imitation, and the color and patterning suggest the dominant attributes of the hatching insect, the marking of its wings and legs or even its abdominal barring and tint. Yorkshire spiders naturally sink to the position of an emergent insect, somewhere between the nymphal and subimago forms, and they suggest stoneflies riding the current to the edge or mayflies in a struggle to rise. The simplicity of traditional soft hackles belies the imitative intent of their originators, who thought that suggesting life through a fly's dressing was more important than trying to mimic each part of the insect.

As angling editor of the *Yorkshire Weekly Post*, Pritt maintained a close connection with the North Country tradition that his book reflects, and he had a reputation as the angler who once landed 300 trout in 12 days. His book lists 62 patterns and recommends the times when they will best match the hatches they are dressed to suggest. Pritt often took his etymological cues from the work of other North Country anglers such as Michael Theakston, an amateur entomologist who took on the arduous task of creating his own, non-Linnaean system to classify stream-born insects. Pritt noted, for instance, that the dressing for his Orange Partridge (No. 32) derived from Theakston's Spiral Brown Drake. In "A List of Natural Flies" (1853), Theakston described this mayfly as having wings that were "a light brown ground, with strong longitudinal dark lines crossed into squares, with small ones" and a body that was "a darkish ashy brown, with a ring of light on each joint, and light line runs along each side; whisks and legs, a blo-brown, dim transparency; eyes, some gogling and come cased; as the season advances they shew distinctly the slanting dark lines along the sides." Theakston's dressing for the Spiral Brown Drake was as simple as his identification of the insect is exact. Rather than imitating the lateral abdominal lines or the eyes, Theakston preferred a simple silk body in orange or yellow, a slight hare's ear thorax, and partridge hackle. The Yorkshire

CHIP LAUGHTON

tradition these authors exemplified was just as invested in imitation as the new Southern dry fly, but Northerners accomplished their imitative ends suggestively, dressing flies that gave the impression of life, instead of trying to mirror it.

Many of the patterns Pritt included in "North-Country Flies" can serve the same imitative ends in Southern Appalachian streams. Tied sparsely, all of them will catch fish. The same yellow- and orange-bodied patterns that Theakston and Pritt described fish well in our streams tied from size 10 to as small a fly as the partridge hackle allows. Three of Pritt's patterns are especially worth carrying as general flies.

Many North Country dressings, like the Winter Brown (No. 3), use a herl head rather than a thorax. The effect is not unlike the sparkle of the modern bead head, only subtler and without the additional weight.

"WINGS.—Hackled with a feather from the inside of a Woodcock's wing.

"BODY.—Orange silk—not too bright.

"HEAD.—Peacock herl."

Pritt's Dark Snipe (No. 10) is, like Stewart's beloved Black Spider, a quintessential soft hackle. In smaller sizes, 18 and 20, it will catch fish in the riffles and glides of free-stone streams and tailraces year-round:

"WINGS.—Hackled with a feather from the outside of a Snipe's wing.

"BODY.—Purple silk."

Since North Country anglers sought to suggest life in their flies, a thinly-dubbed, translucent fur body sometimes took the place of bare silk. Pritt's fur-bodied Snipe Bloa (No. 29) is particularly effective on overcast days and works best in sizes 14 through 18:

"WINGS.—Hackled with feather from under Snipe's wing.

"BODY.—Yellow silk, with a sparse dubbing of Mole's fur, but not sufficient to hide the yellow body."

North Country patterns are adaptable, and materials can be easily substituted. Muskrat can replace mole, and starling undercoverts work for snipe. Pritt advised anglers to be equally versatile, to match their approach to the fishing conditions and to the hatching insects. He argued that "everything depends upon the size of the river, the condition of the water, and the nature of the bait. To fish up stream is an unnecessary labour in discoloured water, and to fish down stream in a clear water is to court both disappointment and ridicule." Fishing downstream at all, however, evoked the ridicule of Southern anglers. They associated downstream angling with traditional wet fly methods: heavily winged, heavily hackled, non-imitative lures were fished so that they would swing unnaturally across the current. When they fished downstream, North Country anglers were merely fishing the water, Southern anglers argued, rather than fishing for trout. It was not pretty or effective or sporting—it was not their chalk-stream sight fishing.

The dry fly anglers' criticism overlooked the challenges that fishing the water presents, knowing the trout's habitat well enough to read it, detecting a subsurface take and setting the hook on what is essentially an invisible fish. In "The Practical Angler" (1857), Stewart applied the upstream dry fly method to fishing soft-hackled flies in the Border streams of southern Scotland. Like Pritt, Stewart believed that sparsely hackled flies with slim bodies best imitated living insects, but he stressed presentation as an integral part of imitation. He preferred to fish aggressively, with short, upstream casts from a stiff rod, using a silk line dressed heavily to float high on the water. While it might be well-suited to the swift streams of the Scottish border, Stewart's aggressive style is also the only style for the angler who would "kill at least twelve pounds weight of trout" per day, which Stewart famously asserted should be the goal of any competent angler. He had a reputation for taking his 12 pounds regularly, fishing with baits like live nymphs, worms and minnows, but he preferred soft-hackled flies.

Stewart observed that an upstream presentation made stalking the trout easier, since the angler would go unseen, and the water would be less disturbed by the angler's approach. Hooking a fish would be easier, too, he argued, because of the direction of the drift and angle of the strike. More importantly, the angler who fished spiders upstream could "better adapt the motions of his flies to those of the natural insect." Fishing downstream, the angler was likely to pull a fly across the current at improbable, unnatural angles or to make the mistake of twitching the fly to suggest the motion of a hatching insect. Simulating life is the job of the fly, since the "appearance of life is certainly a great temptation to a trout, but it may be much better accomplished by dressing the flies of soft materials, which the water can agitate, and thus create a natural motion of the legs of wings of the fly, than by dragging them by jumps of a foot at a time across and up a roaring stream." Stewart believed the fly could only do its job cast upstream into a current that would wash its feathers and fur wriggling like an insect into the mouth of a trout.

Another element of presentation for Stewart was the number of flies on the line. He advocated fishing droppers according to the size of the stream, and by way of offering a guideline, Stewart noted that "some anglers never use more than three, while others occasionally use a dozen." Catching 12 pounds of fish per day seems more conceivable when fishing 12 flies at once, but for most medium-sized streams, Stewart suggested three or four flies, one of which would invariably be the Black Spider. "We were first shown it by James Baillie," Stewart recalled, "and have never been without one on our line since."

The little pasture creek meanders under overhanging shrubs and against cut banks. A few darkish mayflies are coming off sporadically in the tail of pool where I crouch, but the evening is dimming too fast for me to identify them exactly. I knot a size 18 fly with a chocolate-brown silk body and starling hackle to a 6x tippet, cast it upstream and follow the drift back downstream until the line tightens. The Black Spider will pass for this hatch, too.

Neil Norman is pursuing a Ph. D. in English and maintains a blog, Soft Hackles, Tight Lines (softhacklepatternbook.blogspot.com).

WILDLIFE IN NORTH CAROLINA 2014 PHOTO COMPETITION

***WILDLIFE IN NORTH CAROLINA* MAGAZINE IS PROUD TO ANNOUNCE THE TENTH ANNUAL INSTALLMENT OF OUR POPULAR AND SUCCESSFUL PHOTO COMPETITION.** Last year, more than 1,200 images were entered. This year, your winning photo could be published on the cover of this magazine. Adult photo competition entrants must be subscribers to *Wildlife in North Carolina.* Photographers in the two youth categories (13–17 years old and 12 and under) may enter free of charge.

The cost of the prizes and the prints sent to winners has necessitated that the magazine join the ranks of many other photo contests and charge an entry fee.

The *Wildlife in North Carolina* Photo Competition aims to encourage people to participate in nature photography, thereby fostering greater understanding and appreciation of North Carolina's wildlife and wild places. Winning photographs will be published in the January–February 2015 issue of *Wildlife in North Carolina.* Thanks to our exhibition sponsor, JW Photo Labs of Raleigh, the winners will also be exhibited at the Museum of Natural Sciences and at other science museums and wildlife education centers across the state in 2015.

The N.C. Museum of Natural Sciences, our founding partner, is a fantastic place to learn about North Carolina's wildlife and wild places through its exhibits and classes. North Carolina's outstanding state parks are ideal places to photograph wild animals and wild landscapes. Thanks to partner UNC-TV, you don't have to leave home to become educated about our state's wonderful natural resources—just turn on North Carolina Public Television's programming.

Visit ncwildlife.org, the museum, or any of the seven statewide locations of our corporate sponsor, Great Outdoor Provision Co., for more information about the competition. Then get outside and show us your best nature photography.

GEORGE BISSINGER

Beautiful Lake Mattamuskeet in Hyde County has always been a popular location for photo competition entries.

2014 COMPETITION RULES

WHO MAY ENTER

Amateur and professional photographers, except for employees of the N.C. Wildlife Resources Commission, the N.C. Museum of Natural Sciences, and their immediate families (children, siblings and spouses).

WHAT TO ENTER

Photos will be judged in 10 categories:

Birds

Mammals

Reptiles and Amphibians

Invertebrates

Wild Landscapes: The peaks, valleys, plains and beaches of North Carolina.

Wild Plants and Fungi: Wild-growing plants only, including their flowers, leaves, fruits and other parts. Absolutely no cultivated plants will be accepted.

Outdoor Recreation: Show how people interact with North Carolina's natural world through activities that are inextricably linked to nature, such as hunting, fishing, hiking, rock climbing or canoeing.

Animal Behavior: Anything animals do, from everyday activities to interactions with other animals to unusual behavior.

Youth Photographer, 13–17: Any of the above subjects, shot by photographers under 18.

Youth Photographer, 12 and under: Any of the above subjects, shot by children 12 and younger. Photographs must have been taken in North Carolina no earlier than Sept. 1, 2009.

You must declare on your entry form if your photograph is of an animal in captivity, such as at a zoo, nature center or rehabilitation facility. Please do not enter photos of animals that are both captive and non-native to North Carolina (for example, polar bears or lions at the N.C. Zoo).

No pets or domestic animals will be accepted, with the exception of animals participating with people in outdoor recreation (for example, hunting dogs or riders on horseback).

Please do not harass wildlife in an attempt to photograph it.

Manipulation of images, either film or digital, should be limited to conventional darkroom techniques or basic sharpening and cropping. Images should contain only the subject matter as originally seen through the viewfinder. Multiple exposures, digitally stitched photos, high dynamic range images and photos containing any manipulated or added content will not be accepted and should not be entered.

Entries may not contain any text aside from that contained in the subject matter. Date stamps, signatures and trail camera information are not permitted, regardless of whether they are added during or after the image is photographed. Original images may be cropped to eliminate date stamps or other text.

An entrant must hold all rights to a photograph. Photos previously published or pending publication, or that violate or infringe upon another person's copyright, are not eligible. Please do not infringe on the rights of property owners in an attempt to photograph animals.

HOW TO ENTER

Visit ncwildlife.org, click on the Photo Competition link, and then click the Enter a Photo link to submit a photograph. Only JPG files smaller than 2 MB will be accepted for upload. Upload your photo using the online entry form on the website. Repeat this process for each photo entered. Entrants may submit a maximum of two (2) photos per category.

The competition begins at 8 a.m. on Monday, June 2, 2014. Entries must be uploaded by 5 p.m. on Tuesday, Sept. 2, 2014. Entrants may verify receipt of entries by checking ncwildlife.org and clicking the Photo Competition link to view a text list of all entries.

An image may be entered in only one category. For instance, if a photo of a preening wood duck might fit in Birds or Animal Behavior, you must choose the one category in which you want the image to compete.

Entrants in the youth categories must be the appropriate age for the category entered on the closing date of the competition. Once a youth photographer has entered two photos in the proper youth category, they may enter other photos in any other categories they wish.

PRIZES

All winners will be published in the January–February 2015 issue of *Wildlife in North Carolina* magazine and exhibited at the N.C. Museum of Natural Sciences in Raleigh. Winners will also receive a print of their winning entry from JW Photo Labs.

Grand prize: Your photo published on the cover of the January–February 2015 issue of *Wildlife in North Carolina* magazine, plus $200.

First place, all categories: $100.
Second place, all categories: $75.
Third place, all categories: $50.

JUDGES

Winners will be selected by a panel comprised of staff of the N.C. Wildlife Resources Commission, the N.C. Museum of Natural Sciences and professional wildlife photographers.

THE FINE PRINT

By entering the *Wildlife in North Carolina* 2014 Photo Competition, entrants grant all sponsors the right to publish and use submitted photographs in print or electronic form to promote the competition. Reproduction of entries will include the necessary photographer credit.

Entrants agree that if their submission is selected as a winner, they grant all sponsors the right to display their photograph(s) at venues including but not limited to the N.C. Museum of Natural Sciences. Exhibition of entries will include photographer credit.

Entrants will be asked on the online entry form if their photo was taken in a North Carolina state park. All such entries will be provided to the N.C. Division of Parks and Recreation for possible usage in public information/promotional materials, park displays or agency press releases to various media outlets. Any such usage will include the necessary photographer credit.

Winners will be required to provide original source material—slides, high-resolution digital files or negatives—for reproduction in the magazine and for exhibition prints. Original digital files of winning photos can be accompanied by a color print of at least 4x6 inches.

Wildlife in North Carolina staff will determine entry eligibility.

QUESTIONS?

Please do not call about entries. Send questions to competition@ncwildlife.org.

Enter online at ncwildlife.org.
Grab your camera and good luck!

THE Plume HUNTERS

DRIVEN BY THE DICTATES OF FASHION, MARKET HUNTING FOR BIRD PLUMES DROVE SOME SPECIES TO THE BRINK OF EXTINCTION.

WRITTEN BY JIM DANIEL

Enabled by major innovations in transportation and emerging technologies, exploitation of North America's natural resources reached fever pitch in the mid to latter part of the 1800s. Huge stands of timber, along with millions of tons of ores and minerals were harvested and sent to eager markets, fueling our industrial revolution and westward expansion. Wildlife also suffered from this unbridled consumption.

In the West, huge herds of buffalo that once covered the plains were reduced to near extinction in a few decades, while the legendary mountain men of the Rocky Mountains were hoping to make their fortunes by trapping beaver for gentlemen's hats. Once the supply of Rocky Mountain beaver was "trapped out," the era of the mountain man came to a close.

In the Eastern states, waterfowl and other game birds were professionally hunted to meet the demands of restaurants in newly prosperous big cities. Though these birds had long been hunted for local consumption, the arrival of railroads and the availability of refrigerated transport turned a subsistence practice into a large-scale harvest known as "market gunning."

Not so well-known, and scarce remembered today, was a parallel industry; exploiting several specific species of waterfowl, shorebirds and songbirds. In this case the end product wasn't food for the gourmet's table, but feathers and plumage for ladies' hats.

The Rise of Women's Feathered Fashion

The practice of wearing feathers in the hair or on headgear is an ancient one. One easily recalls legions of primitive peoples from several continents, Vikings with winged helmets, knights with plumes, even Yankee Doodle's feathered cap. No matter how elaborate those examples, few reached the extremes of excess and "conspicuous consumption" achieved by women of the French court in the late 1700s.

French ladies' fashion of the time, led by the irrepressible and extravagant Marie Antoinette, called for elaborate hair styles that emphasized elevation. Masses of natural hair were extended to great heights with the addition of hair pieces and extensions supported by hidden forms. Further height could be achieved with the addition of numbers of towering, waving plumes from exotic birds such as the ostrich and birds-of-paradise.

In the French court such fashion was, of course, *de rigueur*. English aristocracy, as was customary, derided the French practice verbally while enthusiastically adopting it. Into the early to mid-1800s, plumage continued as the mark of high society female garb. *The London Times* noted: "At all elegant Assemblies there is a room set apart for the lady visitants to put their feathers on, as it is impossible to wear them in any carriage with a top to it."

About 1830, feathered hats had replaced elaborate hair dressings. Bird wings and entire birds added to the plumes already in fashion. Queen Victoria, though never the fashion diva that Marie Antoinette was, favored feathers in women's dress at court, thereby contributing to the continued popularity of the style among the British. News of London and Paris fashions spread across the Atlantic to the United States where it was received by an eagerly accepting audience of urban women. American demand for feathered millinery soared.

Great Egret

BOBBY R. HARRISON

The American millinery industry stepped up to meet this raging demand. All that was required was a ready supply of plumes and bird skins. American suppliers were sought for those feathers they could supply, as they would offer lower transportation and acquisition costs than importers. The Eastern coastal areas, home to nesting and migratory fowl in great numbers responded enthusiastically. Soon thousands of barrels and cases of dried skins and plumes were being shipped to the milliners in New York and Philadelphia. The end product was seen everywhere among American fashion setters.

Plume Hunting in North Carolina

North Carolina's Outer Banks and Sounds had everything required to supply the milliners: plentiful numbers of several of the most sought-after bird species — egrets, gulls, terns and various shorebirds — access to newly built railroads to transport the goods to the millinery manufacturers in Baltimore, Philadelphia and New York, and a struggling post-Civil War population that welcomed the opportunity to add to their meager annual incomes. Plumage hunting was particularly attractive to those located in more isolated locales as the bird plumes and skins didn't require refrigeration and could be held until a trip to the mainland could be arranged.

The list of North Carolina birds and waterfowl sought for the dubious honor of adorning milady's hats was extensive as indicated in Frank Chapman's "walking survey." Included were sea birds, herons and egrets, game birds, shorebirds even common songbirds. The manner in which they were taken differed with

N.C. ARCHIVES AND HISTORY

F. EUGENE HESTER

The demand for feathers put a price on the heads of such species as the snowy egret (above). John Wallace Salter (right) of Portsmouth was a supplier to both the restaurant and plume trades.

the locale and lifestyle habits of the birds themselves. Resident breeding birds could be taken during the several months of their nesting periods. Migratory species that were in North Carolina only while in transit or during non-breeding periods were taken at opportunity.

Gulls, terns, herons and egrets were among those readily taken during their spring breeding seasons when they congregated in large numbers in rookeries. At that time of year the birds were in their elaborate breeding plumage, which was that most sought after for the millinery market.

One hunter explained the ease of harvest: "They don't like to leave their young. At such places I have often shot strikers (terns) so fast that I had to put my gun overboard to cool the barrels." The abandoned young birds were left to die from predation, starvation or exposure.

In the late 1890s, ornithologist T. Gilbert Pearson noted eight tern and gull rookeries on sand islands in the North Carolina sounds, mostly in Pamlico Sound. The larger of these (including Royal Shoal and the three islands collectively known as the Leggett Lumps) were all off of Ocracoke, resulting in much of the tern and gull harvest occurring in the area. Being full of game easily taken during the nesting season, these rookeries were easy targets.

One North Carolina plume hunter told Pearson, "We've got 'em all about cleaned out. There ain't one striker or gull in a hundred to what there used to be".

Snowy egrets were also taken on their rookeries, but unlike the gulls and terns, the sought-after plumage was only those wispy plumes present on the adult birds' backs during the nesting season. The back section of skin containing those elaborate plumes was "scalped"; the rest being left to rot. As with the tern and gull broods, the offspring of the year were left to die.

During that same 1890s visit, Pearson was no longer able to locate egret nests.

Among the large scale providers to the seabird plumage trade were A.T. Piner and Joe Royal, both of the Pamlico/Core Sound area. Both men shared their records and recollections with Pearson who in "The Bird Study Book" offered the following account:

"During a period of seven years more than 500,000 Terns', or Sea Swallows', skins were collected in spring and summer in the sounds of North and South Carolina. These figures I compiled from the records and accounts given to me by men who did the killing. Their method was to fit out small sailing vessels on which they could live comfortably and cruise for several weeks; in fact, they were usually out during the entire three months of the nesting period. That was the time of year that offered best rewards for such work, for then the birds' feathers bore their brightest luster, and the birds being assembled on their nesting grounds, they could easily be shot in great numbers.

"After the birds were killed the custom was to skin them, wash off the blood stains with benzene, and dry the feathers with plaster of Paris. Arsenic was used for curing and preserving the skins. Men in this business became very skillful and rapid in their work, some being able to prepare as many as one hundred skins in a day.

"Millinery agents from New York would sometimes take skinners with them and going to a favorable locality would employ local gunners to shoot the birds which they in turn would skin."

Many of the desirable "plume birds" along the coast were migratory, and therefore not present in North Carolina during their breeding period, or they weren't prone to nest in rookeries. In either case, rookery hunting wasn't practical. Most ducks, grebes and shorebirds such as curlew, plover and sandpipers were in this category. However, all were flocking birds, traveling and staying in groups. Those flocking instincts made them susceptible to being taken over decoys.

During the season when they "wintered" or "summered" in North Carolina or during the two times a year that they passed through on their migrations, these birds were lured to the exact same forms of decoys used by sportsmen and those "market hunters" who supplied game birds for the tables of epicurean diners. Doubtlessly, many decoys saw dual use in the hands of those who served both markets.

John Wallace Salter of Portsmouth (1875–1950) provides an example of a supplier to both the restaurant and plume trades. His proximity to the Pamlico Sound tern and gull rookeries and his location along the spring and fall migration paths of many shorebirds provided him with ample market hunting and plume hunting opportunities throughout each year.

While Salter's particular methods aren't recorded, he likely skinned and salted his plumage harvest, keeping them in storage until he had a sufficient supply to make the long trip across the sound to Morehead City where he could ship his sugar barrels full of skins to a dealer in Philadelphia.

There are also extant examples of heron, egret and gull decoys. While none of these species are particularly attracted to decoys, they may have been used for occasional harvest. Whether the purpose was to glean plumage for sale or dinner for the table is difficult to ascertain.

The remainder of the plumage birds—common songbirds and non-waterfowl game birds—could be trapped or shot at opportunity or while in transit during their mass migrations. Perhaps the most common of birds taken this way was the bobwhite quail, although most of those taken were shipped whole, evidently destined for the dinner table.

A few carved wooden songbirds exist nationally that are claimed to have been used as decoys, but their identification as such is questionable and the most probable case is that, if they were used as decoys at all, they were used to provide meat for the table and not plumage for fashion. The meager economic returns of taking only a handful of common songbirds for their feathers make such hunting unlikely.

As would be expected, those birds most easily taken that provided the highest market dollar for their plumage were the most highly sought and were taken in the greatest numbers. In North Carolina that unenviable position was held by terns, gulls, egrets and herons.

Next along were the ducks, grebes, and shorebirds, most of which were hunted primarily for their value as food except in those places too isolated to have ready access to refrigeration and rail transport to assure a quick trip to market.

Perhaps close behind the ducks, grebes and shorebirds were legions of non-waterfowl game and songbirds, the harvest of which was limited by the impracticality in taking them in large numbers and the comparatively small market prices.

But however taken, totaled together the plumage harvest was substantial, with perhaps several million birds taken directly and an equal number of offspring left to die.

A WALKING SURVEY

During two afternoon walks in New York City in 1886, ornithologist Frank M. Chapman was able to identify birds' plumage residing on 77 percent (542 of 700) of women's hats.

Wading Birds: Herons, egrets

Sea Birds: Gulls, terns

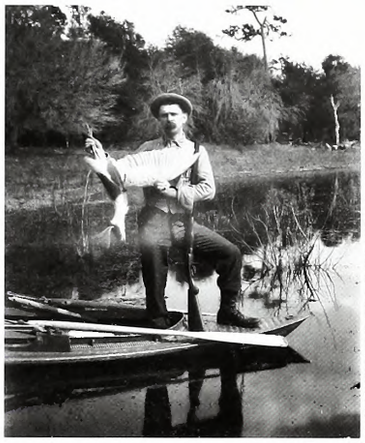
Shorebirds (*Legal Game Birds at the time*): Sandpipers, curlews

Game Birds: Northern bobwhites, grebes, Virginia rail, clapper rail, mourning dove, ducks, geese and brant

Songbirds: Northern flicker, red-headed woodpecker, pileated woodpecker, Eastern kingbird, scissor-tailed flycatcher, tree swallow, blue jay, Eastern bluebird, American robin, Northern shrike, brown thrasher, cedar waxwing, Blackburnian warbler, blackpoll warbler, Wilson's warbler, tree sparrow, white-throated sparrow, bobolink, meadowlark, Northern oriole, grackle, scarlet tanager, pine grosbeak

(BELOW) PHOTO OF JOHN WALLACE SALTER IN HIS CAROLINA SPRITSAIL SKIFF COURTESY OF MRS. EULA PEARL BEAUCHAMP. PHOTO OF FEATHER HAT BY MELISSA McGAW/NCWRC COURTESY OF THE N.C. MUSEUM OF HISTORY.

JACK DERMID



STATE ARCHIVES OF FLORIDA, FLORIDA MEMORY

A hunter displays a black-crowned night heron, which like other species on these pages, survived plume hunting. The Carolina parakeet, the feathers of which are pictured below, already was considered rare by the middle of the 19th century. The last of the species died in captivity in 1918.

(BELOW) PHOTO OF CAROLINA PARAKEET FEATHERS BY MELISSA McGAW / NCWRC COURTESY OF THE N.C. MUSEUM OF HISTORY.

NATURE'S **WAYS**

What is an Aigrette?

See Nature's Ways, page 43.

Several species, notably the snowy egret and the least tern nearly became extinct in North Carolina. The Carolina parakeet suffered total extinction due in part to the plumage trade.

The Decline and Demise of Plume Hunting in North Carolina

The continuing devastation of the America's bird population and the cruelties of rookery hunting didn't go unnoticed.

The American Ornithologists' Union, formed in 1883, had among its members those who favored the concept of protection for birds under law. They formed a Bird Protection Committee. Regrettably, bird protection wasn't universally accepted by the AOU membership, many feeling that freedom to "collect" birds at will was a necessary component of ornithology.

In 1886, George Bird Grinnell, editor of *Forest and Stream* magazine, formed the Audubon Society. Within a year of its founding it numbered nearly 40,000 paid members, each pledged "not to molest birds." That original Audubon Society wouldn't last, but it heightened public awareness and opened the door for others to follow.

About the same time a unique young man began to make his mark on the wildlife protection stage in North Carolina. This was Pearson, who had come to attend Guilford College by exchanging his collection of mounted birds and birds' eggs for partial tuition. Pearson was soon teaching classes in ornithology and botany at Guilford. His enthusiasm and expertise impressed many.

Pearson spent his summers working with H.H. Brimley of the North Carolina State Museum and Professor Joseph Holmes of the University of North Carolina. These "summer jobs" offered him opportunities to visit the coast where he saw firsthand the depredations of market gunning and plume hunting.

In 1900 the U.S. Congress passed the Lacey Act, a bill sponsored by Iowa Representative John F. Lacey that made it illegal to import into any state wildlife that had been taken illegally in any other state. While it was the first national step toward game protection, the law depended on state laws which were mostly nonexistent. Pearson would be instrumental in shaping North Carolina's earliest game protection laws.

In 1901, while teaching at the State Normal and Industrial College at Greensboro (now UNCG), Pearson received a letter from William Dutcher, chairman of the American Ornithologists' Union Bird Protection Committee. Dutcher said that he had heard of Pearson's work and asked that he consider forming an Audubon Society in North Carolina with the goal of passing laws for bird protection, basing those laws on a "model" that the AOU had created. After some initial doubts, young Pearson took on the task.

Pearson held his first recruiting meeting at Greensboro in the spring of 1902, ending the session with 148 members enrolled into North Carolina's first Audubon Society. From that day on, Pearson was much in demand as a speaker and advocate of bird protection laws.

It was clear to Pearson that the passage of protection laws in North Carolina would be an insufficient solution to the problem as, without an enforcement mechanism, any such laws would be toothless. Further, in the aftermath of the Civil War, North Carolina lacked the means and the will to hire the necessary game wardens. In 1903,

Pearson, in conjunction with others on a national level found a solution.

With help from friends in the North Carolina General Assembly, a bill was put forth proposing that with the imposition of laws protecting a list of specific birds, the North Carolina Audubon Society would pay for enforcement, paying for wardens who would work directly for the state.

To help defray those costs, a license fee for out-of-state hunters would be levied, with all proceeds going to the Audubon Society. Although the list of protected birds wasn't complete, the passage of the bill was a triumph that gained Pearson even more national notice. North Carolina became one of the first states to field game wardens and the first in the south with a game commission. Other southern states followed close behind.

But North Carolina's new law was viewed with mixed feelings, particularly in those eastern counties where market gunning and plume hunting played large roles in the local economy. In 1909, two of those counties (Currituck and Beaufort) submitted a bill exempting themselves from the terms of the 1903 bill, claiming that the license fees discouraged out-of-state hunters.

At the same time they quietly suggested that the Audubon Society was reaping huge profits from the out-of-state license fees, funds that could go directly to the counties to be split between county-managed enforcement and local education. When debate ended, the bill had passed with 52 counties exempting themselves.

North Carolina's status changed overnight from being the first in the south with a statewide game commission, to being one of the few states in the region to not have one. It would be 1927 before a new game commission was established.

To report all the legal wrangling that took place at both state and national level—and still continues to this day—is far beyond the scope of this short report. There were victories and offsetting defeats, among the key victories at the national level were:

1913: The Weeks-McLean Law set national guidelines dealing with migratory birds.

1916: A Migratory Bird Treaty was signed with Canada

1935: The Lacey Law was expanded to include prohibition of imports of illegal game

1936: A Migratory Bird Treaty was signed with Mexico

Though there were, and continue to be, outlaws and smuggling, plume hunting effectively died out, hounded by restrictive laws. Perhaps the killing blow came, not from legal action, but from changes in women's fashion after 1910. Those elaborate feathered hats of the late 1800s and early 1900s were impractical to wear when riding in an automobile.

Jim Daniel is a longtime waterfowl hunter, working decoy carver and historian.

Little Blue Heron

DAVID LEE

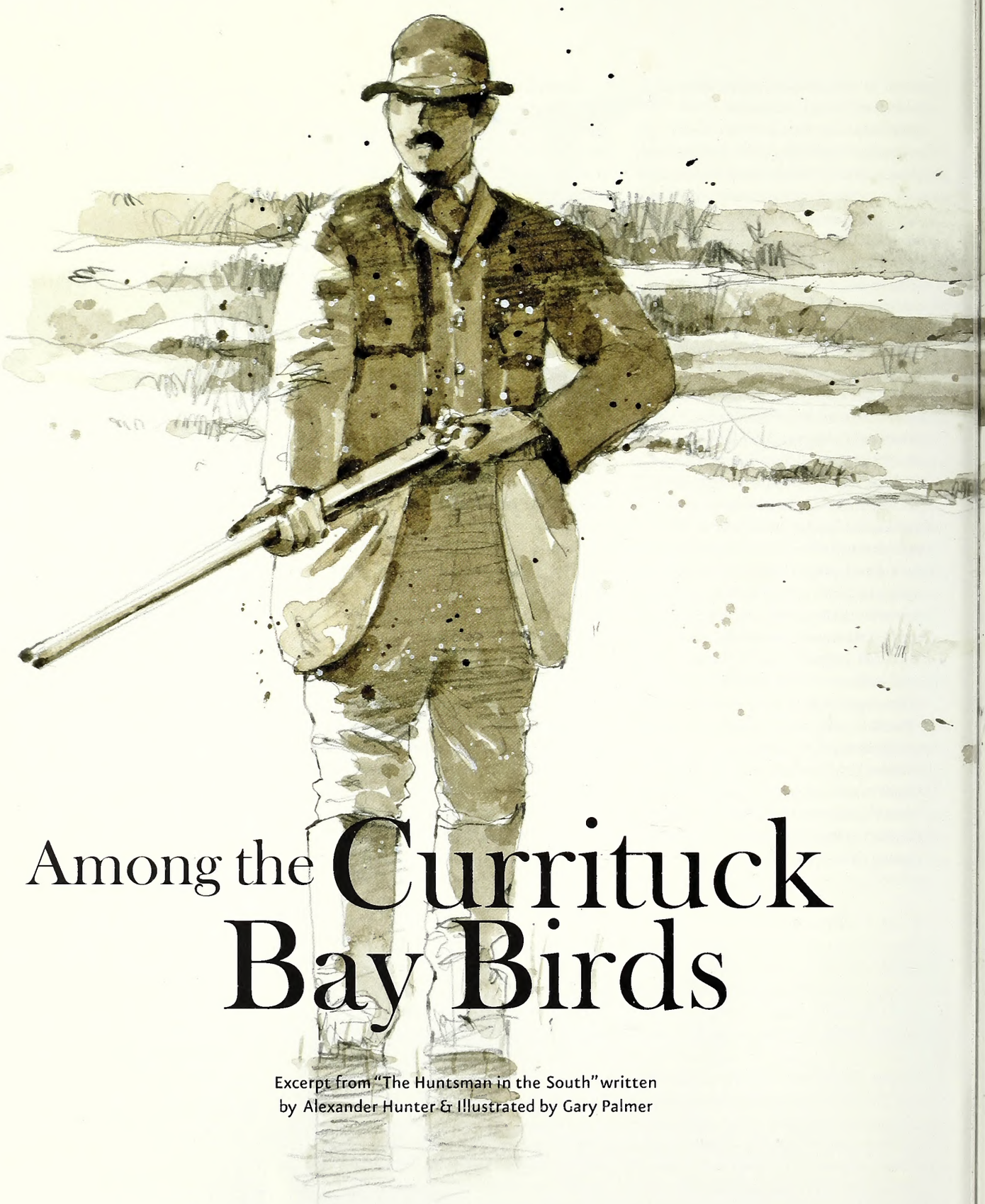
Forester's Tern

F. EUGENE HESTER

NEW BOOK EXPLORES NORTH CAROLINA SHOREBIRDS

In North Carolina, shorebirds were hunted for their plumage, for the gunner's table and for shipment to the markets of the major cities of the Eastern seaboard. Whatever the uses, an important part of the shorebird hunter's gear was the decoy.

North Carolina's historic shorebird decoys are the subject of a new book expected out in the fall of this year or early in 2015. Heavily illustrated with photographs, "Shorebird Decoys of North Carolina" by Kroghie Andresen & Philip Harvey is a compendium of shorebird decoy styles and history. "Plume Hunters" will appear as a chapter in the book.



Among the Currituck Bay Birds

Excerpt from "The Huntsman in the South" written by Alexander Hunter & Illustrated by Gary Palmer

Hunting as it was in North Carolina more than 100 years ago.

When getting ready for my regular summer trip to the North Carolina Sound, I looked around for a good quartet. As the world goes, one learns many things, and one of them is that for a hunting party "us four and no more" is the exact number that will give the greatest mutual benefit. Four can pair off; four can separate equally, leaving no man, like the fifth spoke of a wheel, useless and alone. Four can make a full whist hand, or "seven-up;" in fact, four is the sportsman's number, as potent as the magic nine of the Chaldeans.

It is a matter of indifference to me whether or not my companions are good shots, as but a fraction of the time spent on the trip is spent in actual shooting. It is good comradeship that makes nomadic hunting a success. There are certain types of men that should be avoided, like poison, on such expeditions.

Now the crowd I invited to my Currituck Club were men of different metal. Everybody in Washington knows Captain Burgess. A fellow of infinite wit, and, like Falstaff, the cause of wit in others; well into the forties, he was the image of Fritz Emmett, when Emmett of genial memory was at his best, and had Burgess taken to the stage in his youth he would have made his mark.

"Cap," as he is called, is fond of all kinds of game, and is as much at home when bluffing on a bob-tail flush as when blazing away at the birds from sink-box or blind.

"Mac" is a tyro, but willing to rough it, and, except when his liver is out of order, takes alike with frolic welcome "the sunshine and the storm." York, the youngest of the four, is an ardent sportsman, a quick, sure shot, and his capacity to rough it is second to none.

As for the outfit—a party going on a hunt is almost sure to take much more than they need. I gave each man a list of things for a week or ten days' absence; they were simply to go in light marching order, with no wagon-train. One old suit of clothes for hunting, and

to be worn there and back; a change of underclothing, india-rubber boots or old shoes, oil cloth, 500 shells, a mosquito net and a pair of old kid gloves with the fingers cut off, and an old slouch hat. That was all. Of course each man clubbed in for the liquids.

Reaching Norfolk, we ordered one ton of ice, to be forwarded to the club via steamer, to preserve the birds. As we did not start for Currituck merely to slaughter birds, but to give to our epicurean friends at home a rare dish of broiled snipe, we used the only means possible to preserve those dainty and perishable birds; we also went around to a game commission merchant and rented two ice-packing cans, each about six feet long by four feet wide and three feet deep.

The merchant gave us minute directions as to how to pack the birds. Two tons of ice, he thought, was sufficient; but the expense of getting it to Currituck Sound when there was no direct transportation would be more than the cost of the ice itself.

We took the cars to Virginia Beach, and meeting with Captain Drinkwater's team we were driven along the beach for thirty miles to our destination. The tide being high, it was an all-day's journey, for, instead of fast trotting along the smooth, velvet beach, we had to plow through eight inches of sand, and an ox team would have been just as serviceable under the circumstances as a pair of fleet goers.

The Currituck Inlet Club had been founded some five or six years before by a small and select party of Norfolk gentlemen, who kept the membership down to one dozen. Afterward the club was increased to twenty, then to thirty, and the initiation fee was also increased, and certificates of stock issued; there was no printed constitution and no by-laws.

The place was famous for its sea-meadows, and has been celebrated for a century or more as the finest place for bay-bird shooting on the Atlantic Coast. On one side is the ocean, and Currituck Sound is on the other. The club's meadows are about a mile wide and a couple of miles in length. The grass is short and thick, with here and there shallow ponds that are filled with water except in time of drought. These basins are the great reservoirs for the yellow shanks, graybacks, grass plovers, which mostly arrive in May, disappear in June, and return again in the latter part of July, and remain until sometime in October.

While epicures and gourmands consider these birds most excellent in delicacy and flavor, few ever reach market. Snipe are safe from the pot-hunter, for their flesh is so fat and tender that they spoil in a few hours on a hot day, and they must be placed on ice shortly after they are shot, and kept there until they are served, else decomposition is sure to follow. Of course market-gunners cannot afford to bring ice such a distance, even had they a refrigerator to hold it and packing contrivances to ship their game. Hence, though the birds command a fancy price, and are in great numbers, the natives or gunners do not care to waste their ammunition except to supply their own tables.

This leaves the clubmen a fine show, and as few of them ever come down during the summer there is choice shooting for the few who care to risk the positive discomforts of torrid weather, swarms of mosquitoes, and the absence of all fresh fruits and vegetables, for this pure sandy soil produces nothing, neither orchard nor garden stuff; even the milk is canned.

The glory of this club is in its snipe shooting; the ducking privileges are far from choice, and cannot be compared with those of adjacent clubs. This being the case, it is to the interest of the club to guard zealously its rights and privileges. How this is done I will presently show.

The regularly appointed keeper of the club is C. S. White, or "Shant" White, as he is called. His brother Leon once lived on the lands of the Swan Island Club, but was forced by that organization to leave the place, and owning a marsh and piece of ground on the lands of the Currituck Inlet Club, he erected his dwelling there. Mac and I stopped at Shant White's, while Cap and York remained at Leon White's, about 100 yards distant.

On approaching the keeper's house we found him stretched upon a shuck pallet in the yard, playing with his baby. A big pan filled with lightwood knots was burning brightly, and though the flames attracted the mosquitoes from far and near, yet the pungent, resinous smoke kept them at bay. These smudges are the favorite method employed by the islanders to get some rest and comfort in the early part of the summer nights; they retire early and get up late. Twelve hours good, solid sleep, with a half dozen naps during the day, suffices to keep them alive.

The place was famous for its sea-meadows, and has been celebrated for a century or more as the finest place for bay-bird shooting on the Atlantic Coast.

About sunrise we started for the shooting grounds about a mile away, a team carrying our guns and shells. The mosquitoes were out in force, and literally covered our bodies; but with the nets covering our heads, the gloves on our hands, we bade defiance to them.

"Skeeters is bad, certain," remarked Shant, clutching a handful off his neck and crushing them in his palm. "They will carry me off, wagon and all, ef they keeps on this way; almost drain my blood."

"What blood can they get out of you, Shant? Tell us that," remarked Cap.

"They ain't after my blood," said the driver, "but after the supper I ate last night, I reckon; and then they will suck my bones ef I let 'em." Then he got down, broke off a bunch of twigs, and fought them as if they were a swarm of ireful yellow-jackets on the warpath.

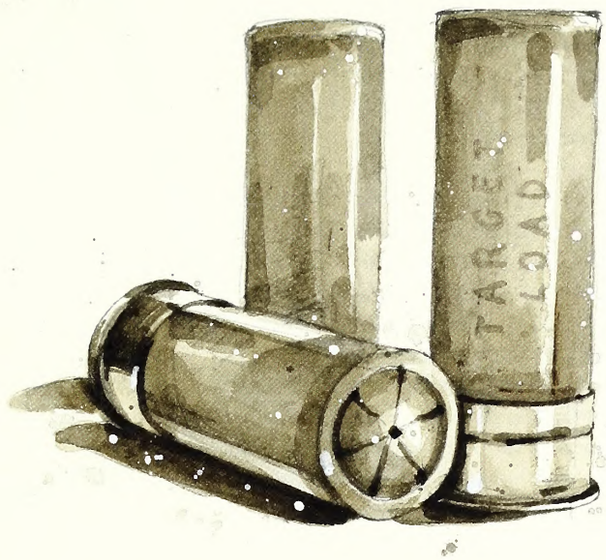
Fortunately for the sportsmen, the beams of a hot sun, or a stiff breeze, causes these pests to sink out of sight; but for this wise provision of Nature such a thing as hunting bay-birds on the North Carolina coast would be impossible. I have had some hard experiences in my life with these insects; I have fought the Jersey mosquitoes, off the coast, battled with them in the Florida everglades, and have suffered their torments in the swamps of Cape Charles; but for persistency, bloodthirstiness and relentless persecution I give the palm to the North Carolina coast mosquito. They seem larger than any other species I ever met, and as these shallow pools on the sea-meadows are their breeding places, they literally swarm. On our drive through the bushes that day they covered horse, cart and occupants, and not until we got out in the open and caught the strong wind from the ocean did they take leave of us.

We occupied blinds a couple of hundred yards or so apart. A few bushes stuck in the ground, a small box to sit upon, a couple of dozen tin decoys stuck in the shallow ponds, and we were ready for work.

The cart put back to the house, Shant telling us he would call about 10 o'clock. All around were the flying birds; at once the snipe began circling over the decoys, and each gun was ringing out in the morning air.

I alone had taken a trained setter, and he now crouched in the blind awaiting my signal to bring the killed and wounded birds. The bay-birds here rarely fly in flocks, consequently all our shots were singles and killed flying.

The birds seemed to detect the cheat as they approached near the decoys, and invariably shied off, thus bringing the gunner's skill into full play. I suppose we averaged a shot every two minutes, though of course not regularly. Sometimes we would fire so fast that but for our thick gloves we could not have held the heated barrels; then a lull of a minute or two would come. For more than an hour I made preparations to light my pipe, but before I could succeed I would have to stop to shoot, and my friend and comforter was taken up and thrown hastily aside a dozen times because the birds came so fast.



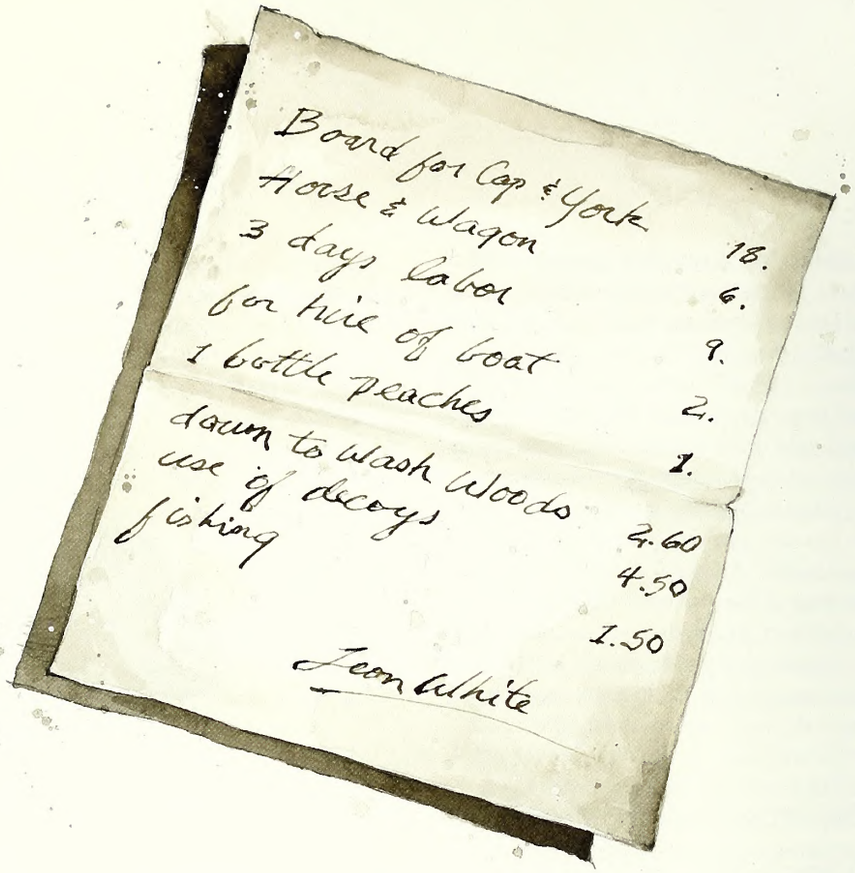
There was no necessity for calling them; they would head for the decoys of their own accord, and it required at times some fancy shooting. It was comparatively easy when they circled or beat against the wind, but when they darted by, borne on the pinions of the breeze, they went like a rocket, and one had to swing the muzzle of his gun fully five or six feet in front to knock them over.

I used that morning a No. 12 Colt gun, and found that it worked admirably, though the natives invariably shoot snipe with a No. 10 bore. As to the size of shot, the standard seems to be No. 8; but I think that is too large for this kind of shooting, one size smaller, or even two, being better adapted to the work, as the snipe is not a tough bird and is easily killed.

The sun was about an hour high when the sky became overcast and one of those sudden storms so common to the North Carolina coast burst upon us. The rain came down in torrents, being driven almost horizontal by the gale of wind.

Then it was that the bay-birds came with a rush. It was a new experience to me, to shoot in the face of a tropical thunder storm. The rain was so dense that it was impossible to see the snipe until they were well over the decoys, and it was tough work bringing them down. I had to shoot entirely with my back to the wind; it was utterly impossible to see how to aim, facing the blast; it was like having buckets of water dashed in my face, and completely blurring my vision. I made many misses, and knocked over only about one bird for every two shots.

In a few moments the face of the whole country was completely changed; instead of the level sea-meadows with here and there a pond, the scene was reversed, and as the storm died away and the sun burst out its struggling beams showed a vast sheet of water, with only here and there a hillock of sand.



Then ensued some moments of rest, which we all utilized in gathering our game. Jessie, my setter, saved me many a long chase after cripples.

It is a singular fact that a blue-blooded setter hates to retrieve salt-water snipe. From long generations of hunting the quail and its kindred, they learn to distinguish that kind of game by instinct, and any bird so different in scent from the quail or upland game-birds ceases to afford them pleasure. Certainly Jessie manifested, at first, great reluctance to touching them, and it was only her habit of implicit obedience, the result of long and thorough training, that made her obey my commands.

On counting up, my pile showed 114 birds to 150 shells fired. Cap came next with a score of 80, while York made a fine showing; it was his first experience with the bay-birds, and with 100 shells used he had brought down 57 birds, all single shots.

Tuesday we varied the proceedings by a water trip to the various clubs in the sound.

The Swan Island property is very valuable; likewise is that of the Light-house Club, and a glance over their register showed them to be a set of genial, jolly members, sportsmen and gentlemen to the core. Our party was much indebted to the courteous keeper of the Light-house Club for many kindnesses. Monkey Island Club is a secluded retreat, and is probably the smallest club in existence, it having only four members.

There had lately been formed three new clubs in this vicinity, the Martin Island Club, the Deal Island Club, and the Ragged Island Club. The two former are fine places for ducks, such as mallard, shovelers, black duck and the like; but the Ragged Island's property is without exception the finest game preserve along the whole Atlantic Coast for redhead and canvasback. This lies in Back Bay, adjoining Currituck Sound, and consists of some thirty or more islands, ranging from six acres to a few rods in area. The preserve is about three miles long by one and a half miles wide. The Ragged Islands have been the most famous shooting spot in this section; indeed, if all the tales I have heard of the bags made there are true, it is the gunner's paradise. The shares of this association were held at $1,000, and Mr. C. A. Woodward, a young merchant of Norfolk, was president at that time.

We reached our own club about 10 o'clock, nearly starved, only to find that all had gone to bed and there was nothing in the house to eat, the cook not expecting us until the next day. We then went over to Leon's house, where we found the remains of a supper. Hungry as we were, the sight took away our appetites, and we told him we would ask for no supper if he would have a smoking-hot breakfast for us early in the morning. To this he assented, and we returned to sleep with aching voids that tinctured our dreams. We awoke early and went over to Leon's to eat that hot breakfast; to our dismay, the whole household was buried in profound slumber. After hammering at the door, that worthy came yawning into the porch, his "galluses" hanging down his back.

He drawled out he " hadn't no breakfast," and ushered us into the same room with the same table, the sight of which had turned our stomachs the evening before. There lay the greasy ham and the saleratus biscuits. It was eat or starve, for we could not go to the blinds in our present condition, not having eaten a square meal for twenty-four hours. We felt like the man who had to eat crow—"we got outside of it, but we didn't hanker arter it."

We made Shant hitch up his team, and York and I set out for the blinds. During the whole journey not a word was spoken; we were too mad. But the bay-birds flew beautifully, and kept us working at our guns in a lively manner. I used No. 12 and 16, and the latter fully answered my purpose in the majority of shot.

Wednesday evening we drove several miles in the wagon, and seeing some grass-plover I placed my decoys in a pond, and without any blind I squatted on the edge and awaited developments. The others kept on to occupy their old blinds.

Of all the birds in this section, the grass-plover is the finest and largest, but they do not often come in such numbers as to afford continuous shooting. They are fast flyers, and

rarely circle around the decoys, but dart by. I happened to strike the right spot at the right time, and never in my experience did I see such a steady flight; they came twenty or thirty a minute without a break. I had some three score of No. 12 shells, and I fired straight along, the birds dropping right and left, and but for my dog I would have lost most of them, for it was useless to chase cripples; one would miss a dozen shots by so doing. Owing to the long shots, fully one-half were only winged and fell into the grass. Jessie lay crouched at my feet motionless, and only at the word of command would she dart like a streak after the bird and bring it and drop it at my feet. Owing to my want of concealment all the birds shied to the right or left, and every shot had to be taken over fifty yards.

These grass-plover have a spread of wings equal to that of a sea-gull, and they know how to use them. When killed they do not fall, but tumble to the ground. I soon fired my last shell from my No. 12 Greener and seized my No. 16-bore, but I might as well have shot with a horse pistol.

Friday all hands were out early, and it being our last day, we remained in the blinds until the early afternoon. Cap, who took an all-day's shoot, closed the day with 106. Both York and Mac did well. I stopped at 118. A final count-up showed the grand total was 1,267 birds. Large as the score was, it could easily have been doubled had we hunted steadily and started out at dawn every morning.

On returning from each shooting, the birds, perfectly dry, as the slightest moisture decomposes them, were laid side by side, belly upward, in shallow zinc cases about three feet long, twelve inches wide, and about three inches deep. There was only one layer of birds put in each case, which was then fastened and placed in a large refrigerator, and covered with broken ice. In shipping, these cases were placed in ice boxes. The birds soon become frozen, and will remain fresh and sweet as long as the ice lasts. It should be renewed every twenty-four hours. It is indispensable that this is looked to, for a change of temperature for even one hour will ruin the birds. We were compelled to order another ton of ice, and at least half of it melted in transit.

After dark all hands set to work collecting our traps. Mac and I settled with Shant. His charges were exceedingly moderate, $7.50 for board, $2.50 for boat-hire, cart-hire, and personal attendance.

Just then York came in, laboring under some excitement, and asked me to come over to the other house, as there was going to be music in the air. He said that Leon's bill would bankrupt the crowd. It was exactly double the other. I have one of the bills beside me now, and will copy the unique production:

"Board for Cap and York, $18; horse and wagon, $6; three days' labor, $9; for hire of boat, $2; one bottle of 'peaches,' $1; down to Wash Woods, $2.60; use of decoys, $4.50; fishing, $1.50."

The charge of $9 for personal service, "labor," topped, in the way of extortion, anything that ever came under our observation, seeing that both York and Cap cut their own bushes, made their own blinds, planted their own decoys, and brought in their own birds. The "labor" of this worthy consisted in dumping his guests on the ground and then driving off. Even the decoys were not his, for I had loaned York a portion of mine.

I settled the matter by advising my friends to pay Leon White exactly the amount his brother had charged us, neither more nor less.

A word of advice to those contemplating going down to shoot on the North Carolina coast: always make your bargain beforehand. Do not be restrained by any notion of false delicacy, for the natives, as a general thing, are going to charge as much as they think the visitor will stand. The advice I give to sportsmen going there is based on knowledge gained by many years of experience. Make your contract for board, attendance, and so on with the keeper and guide, and in the presence of one of your friends. Also make a note of the terms on a piece of paper; a simple thing to do, but one that may save the visiting gunner a lot of annoyance and vexation.

A week's summer trip to shoot snipe on the Virginia or North Carolina coast, at the outside, should not cost over forty dollars; that is, with Norfolk as the objective point. That amount will cover everything—ammunition, liquids, and all.

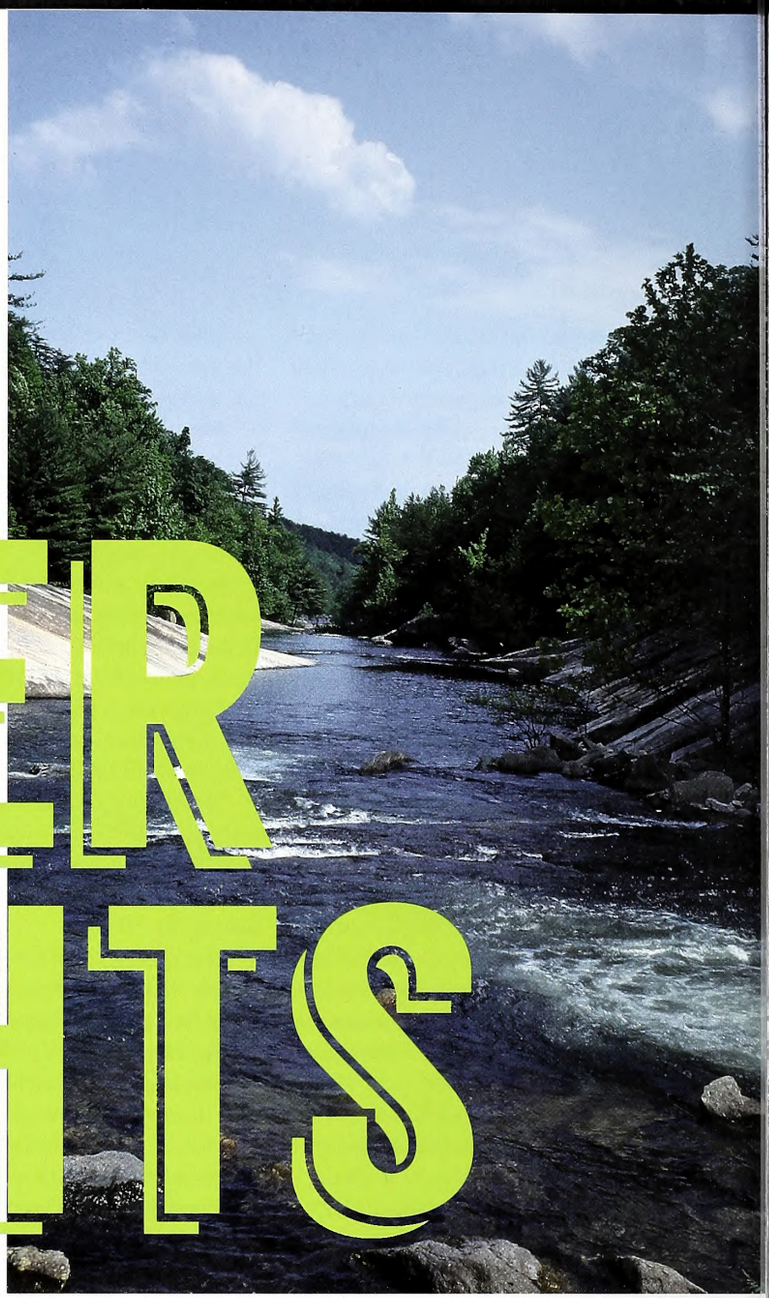
Board at the keeper's house is one dollar per day; never pay more. Two huntsmen can make the trip for $35 each, and four together can have the whole week at a maximum of $30 apiece.

This trip was, barring some set-backs, a great success; of course there is a reverse side to every shield, and just here I want to emphasize one fact, that only a born sportsman can take the fat with the lean. A man who becomes discouraged and disgruntled on a hunting-trip had better give away his gun, and make of his trained setter a housepet, for the sporting blood is not in his veins.

Speaking of bay-birds, it is a singular fact that they disappear utterly and entirely during a dry spell; but a heavy rain that fills up the waterholes in the sea-meadows will bring them back in uncountable numbers; they seem literally to drop from the sky. I have often wondered where they hide themselves; it is certainly not migration, for even a sudden thunder-shower will cause them to appear instantly in vast numbers. As Shant White, the keeper of, the club, expresses it, "They comes and they goes like the skeeters." ◆

This excerpt is taken from "The Huntsman in the South," written by Alexander Hunter and published in 1908. Hunter, a native of Norfolk, was quite familiar with the Currituck area and hunted waterfowl and shorebirds there.

RIVER RIGHTS



KEN TAYLOR/NCWRC

Knowing when you're fishing legally and when you're trespassing can be a tangled web.

Written by Beau Beasley

Folks fishing in the Tar Heel state aren't much different from anglers anywhere who are looking for a little solitude and a chance to connect with nature. Regrettably, opportunities to get away from work seem to be harder and harder these days, and a lack of access to prime fishing locations is a genuine concern for anglers and fisheries managers alike. Unfortunately conflicts between the angling public and riparian land owners are becoming more frequent, and reports of anglers becoming embroiled in legal issues concerning river usage are becoming more common. While we tend to think of the more populated states in the East as having the most access issues, similar issues in states like Utah and Montana are currently working their way through the courts. The main thrusts of these cases are trying to determine just where the public has access to state rivers and where they may go once they've entered those waters.

The primary thing to remember as we look at access is that it is a very complicated issue. Whether he's afloat on a river or wading it, what an angler thinks he knows about access might be right, but also might be incorrect. It is incumbent on the angler to find out what the laws are for where he intends to fish.

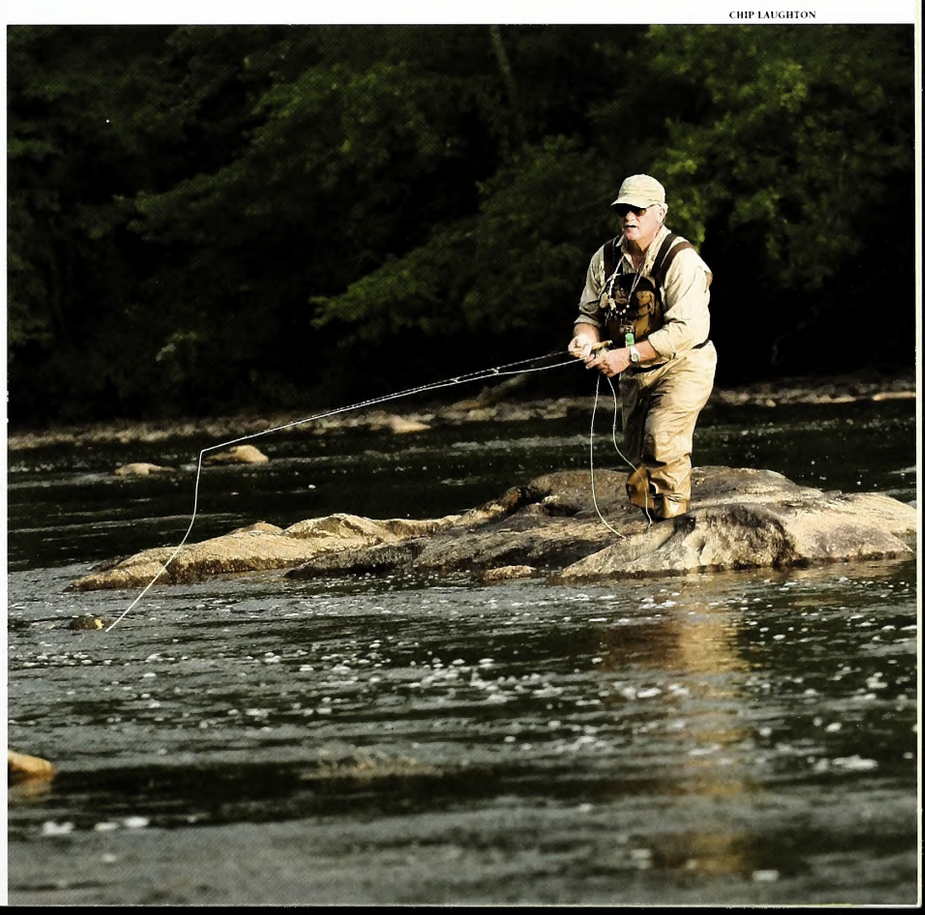
Navigable vs. Non-Navigable Rivers Determining what rivers are navigable or non-navigable is important to states as well as the federal government, and thus Congress set up a mechanism to determine this important distinction on a broad national level. One of the main purposes was to assist the country in developing trade with foreign nations; clarity was needed to determine who would have jurisdiction over harbors and ports. Section 10 of the Rivers and Harbors Act of 1899 gives the Army Corps of Engineers (ACE) broad authority to deem a river navigable as far as the federal government is concerned. Once this rating has been made it can never be revoked unless done so by a federal court. It is important to note further, that this applies only to the river's surface; the ownership of a riverbed is dictated by state law. However, this becomes confusing for sportsmen since individual states often have a different definition of navigability than the ACE.

Generally speaking, rivers are broken into two broad categories of being navigable or non-navigable. According to the ACE, navigable rivers are fit for commercial use or have been used for commercial purposes in the past. The Mississippi River is obviously navigable, although navigable rivers need not be so large. In the past, loggers often used rivers to float timber downstream, and so many states contend that rivers used in such a way in the past are therefore deemed navigable. Examples of navigable rivers in North Carolina according to the ACE definition would be the Cape Fear, Neuse, New and French Broad rivers.

According to the ACE, non-navigable rivers are generally much smaller in size and are commonly seen on farmland, but are certainly large enough to float watercraft like kayaks. In many cases such waters have fences across them to contain cattle or divide property. While you may be able to float your kayak or canoe down a non-navigable waterway in some states, this doesn't apply in every state. In Virginia, for example, if a river doesn't carry a "navigable rating" from the ACE, it doesn't matter if you can float a kayak or canoe on it or not, you're not allowed to paddle there, much less wade on the river bottom.

This angler could be trespassing and not even be aware of it. The state defines rivers as "navigable" and "non-navigable." Rivers that are navigable by state law are held in public trust; non-navigable waters can be privately owned.

CHIP LAUGHTON



Most states recognize the ACE as the prevailing authority on the issue of navigability; states may retain the right to deal with the riverbeds themselves, however, which is why riverbed ownership has become such a big issue. If a state owns the riverbed in trust for the public, then the public is free to walk or float up and down the river as long as they stay in the river. Again, if the river is non-navigable, you may be trespassing without knowing it, which is why I recommend avoiding non-navigable waters without the permission of the landowner. Even if you are fishing a navigable waterway, once you get out of the river and venture onto dry land, all bets are off.

Navigability as defined in North Carolina North Carolina has a much broader definition of navigability than the ACE and holds its navigable waters as a "public trust" according to G.S. 146-64. As late as 1995 the North Carolina Supreme Court ruled in *Gwathmey v. State of North Carolina* that

"[I]f a body of water in its natural condition can be navigated by watercraft, it is navigable in fact and, therefore, navigable in law, even if it has not been used for such purposes."

So in a straightforward reading of this case, if you can float a canoe or kayak on it, it's open to public fishing. More insight about what is and isn't open to the public as it applies to kayaking and fishing in North Carolina can be found in a letter written on Jan. 20, 1998 by Dan C. Oakley, senior deputy attorney general, to Richard Whisnant, who worked for the N.C. Department of Environment and Natural Resources at that time. While the letter isn't an exhaustive explanation of all the rights citizens of North Carolina might have, it is very instructive as to who can use the river and how.

Mr. Whisnant asked: *"Do all citizens have the right to travel by boat down the course of North Carolina streams that are navigable in fact by canoe or kayak, without the consent of riparian property owners?"*

Mr. Oakley responded: *"The answer to your question may be summarized as follows: Yes. Citizens have the right to travel by 'useful vessels' such as canoes and kayaks, 'in the usual and ordinary mode' on waters which are in their natural condition capable of such use, without the consent of the owners of the shore.*

"Under the public trust doctrine, as applied in North Carolina, citizens have the right to use the state's navigable waters for the exercise of public trust rights, without the consent of riparian owners, i.e., the owners of the land adjacent to those waters. Public trust rights are defined by common law, and 'include, but are not limited to, the right to navigate, swim, hunt, fish, and enjoy all recreational activities in the watercourses of the State and the right to freely use and enjoy the State's ocean and estuarine beaches and public access to the beaches.'" N.C.G.S. 1-45.1.

This doesn't mean, however, that once you find a river that's capable of floating a kayak or canoe; you are free to do anything you want. The same letter went on to state the following:

"However, the right of navigation gives no license to go and come through and over the riparian owner's land without 'let or hindrance.' Similarly, those navigating a river have no right, as incident to the right of navigation, to land upon and use the bank at a place other than a public landing without the consent of the owner, for the banks of a navigable stream are private property."

The letter ends by admitting there are some limitations that apply even to those waters on which pleasure craft can go at a certain point.

"It is not possible to say with confidence how far up a watercourse public rights may extend. At some point, navigability 'in the usual and ordinary course' ceases, and public trust rights give way to those of private property. As the Supreme Court noted in State v. Baum, '[w]e are not prepared to say that a land owner would be liable to criminal prosecution because he happened to put a watergate across a creek up which otherwise an idle hunter might be able to pole a canoe...'" 128 N.C. at 604.

This raises an issue that is key for wade-fishermen, who often fish non-navigable waters: when does a river cease to be navigable? The answer, if there even is one for every river, or indeed, any river, is murky and possibly fraught with concerns for the angler on foot. Again, the best course is to seek permission from the landowner if you are at all concerned that you might be on private property.

What is private water? Property rights are important to everyone and are enshrined in the U.S. Constitution. North Carolina state law also speaks to this issue directly in state code G.S. 14-159.7, better known as the Landowner Protection Act. This law provides landholders a means to post their property and require permission dated within the past 12 months, signed by landowner or lessee, to hunt, fish or trap game. Even if navigable water which is open to public fishing can be easily observed from a public road, state law forbids you from crossing private property to get there without landowner consent. You must enter at a public boat ramp, or some other legal access point.

Now that we've agreed that personal property rights are important, and landowner's have a reasonable expectation to their privacy, you may ask, "Why can't I go and fish anywhere I can float my kayak or canoe as long as I don't get out of the boat? "After all, if the river bed is held 'in trust' and I don't walk on the banks, aren't I in the clear as long as I am legally licensed?"

The answer to this question isn't as clear as it may appear. Yes, rivers that are navigable by state law are held in trust; non-navigable rivers, as we've discussed, can be privately owned. When a river's navigability is in question it can result in legal action where "a find-

WHAT'S A FISH WORTH?

Riparian landowners and those seeking to use their local river either for fishing or other means of enjoyment sometimes result in legal action which can be costly for all concerned. A recent case in Virginia called *North South Development vs. Garden* occurred along the Jackson River where a riparian landowner successfully sued an angler over wading while fishing along the river. Both sides spent approximately $100,000 in legal costs and ironically the ultimate decision on who owned the river bottom outright was not decided. While legal battles about who can use the river and how do occur between anglers and river users, this is not always the case. Currently the state of North Carolina is suing Alcoa regarding who ultimately owns the bed of the Yadkin River.

WHEN A RIVER'S NAVIGABILITY IS IN QUESTION IT CAN RESULT IN LEGAL ACTION WHERE "A FINDING OF FACT" IS DETERMINED BY A LOCAL COURT AS TO WHAT IS OPEN TO THE PUBLIC.

MELISSA McGAW/NCWRC

WHAT'S AN ANGLER WORTH TO THE STATE'S ECONOMY?

A 2008 study done at the request of the NCWRC, which specifically targeted the economic impact of mountain trout anglers, is enlightening to say the least. While most members of the public rightly assume money spent on fishing gear is important to the state's economy, anglers and in particular out of state anglers, also hire guides and frequent hotels, restaurants, and other businesses.

The report reads in part... "In total, 92,769 mountain trout anglers (76,761 residents and 16,008 nonresidents) fished for 1.42 million days in North Carolina in 2008. They spent $146 million and had a total economic output of $174 million when indirect economic effects are factored in."

The report also went on to say that this economic driver was directly related to nearly 2,000 jobs within the state. For more information on North Carolina's Public Mountain Trout Waters program please visit ncwildlife.org/fishing/trout.

Generally speaking, the Army Corps of Engineers considers a river navigable if they are fit for commercial use, usually by logging or maritime trade. The state has a broader interpretation of navigability, extending to other vessels.

ing of fact" is determined by a local court as to what is open to the public. When anglers simply "assume" something is navigable rather than requesting landowner permission, negative outcomes can occur.

Private Water and Public Fish

The challenging job of managing the state's fisheries on both publicly owned and privately owned (but publicly available for fishing) waters, is no small task. Jacob Rash, who has a bachelor's degree and master's in Fisheries and Wildlife Sciences, serves as the coldwater research coordinator for the N.C. Wildlife Resources Commission (NCWRC). Rash has worked for the NCWRC since 2005, and says he loves his job, but admits it has its challenges. "One of our biggest concerns as an agency" says Rash "is having enough publically accessible water for current and future generations of anglers."

The agency is constantly on the lookout for new opportunities, and several years ago purchased a portion of Wilson Creek from a landowner in Caldwell County for public use.

Anglers wishing to fish in North Carolina and in particular the western part of the state are in luck. Since angler access ranks as a high priority with the Wildlife Commission, the agency has worked closely with landowners to ensure as much public access as possible. Tar Heel sportsmen may be surprised to learn that NCWRC Public Mountain Trout Waters program has nearly 800 miles of privately owned streams that are stocked and open to the angling public at no charge. This means nearly 80 percent of the stocked trout water in the state is stocked in rivers or streams owned by private individuals.

The popular program is a boon to anglers and is fairly straightforward. Landowners who are interested in the Public Mountain Trout Waters program can contact the North Carolina Wildlife Resources Commission to express an interest in participating and to learn more information. If entered into the program, the agency will post regulatory signage that allows anglers to fish on the river. To ensure only legal anglers are on the property and all game laws are being obeyed, state law enforcement officers patrol the property conducting spot checks. Why would riparian landowners do this? According to Rash it's as straightforward as mountain life itself. "Many landowners are anglers themselves, or fished these mountain streams as kids. They want to see this fishing heritage passed on to the next generation, and it's primarily through their generosity that we've succeed in this program."

What happens in a conflict?

Innocent acts of trespassing on private property do occur each year, but this is not an excuse nor will it be a defense should you have to go to court. This is why being certain

CHIP LAUGHTON

JEFF MOORE

of where you can fish legally before you go is so important. If you find yourself in a situation in which a law enforcement officer asks you to leave a location, do so immediately. Be sure to ask for the law enforcement officer's card so you can follow up later after checking with the NCWRC. They will be glad to assist you in ensuring that you're on public property, or have a right to fish in appropriate locations. It's possible that local law enforcement officials were working with incomplete information. This is why asking for the officers contact information is important. With this information in hand, you can follow up with the local sheriff's office later once you've verified you were indeed on public property or had permission to fish on that particular stream.

Before heading out to any waterway to fish this season, be certain you've obtained the proper fishing licenses and know the rules and regulations of your destination. Check to ensure that you're fishing on property that is either publicly owned or private property the state has entered into an agreement with that allows for public fishing. When fishing private property with permission, be sure to park in the appropriate location and close any fences you may need to open. In addition, you should make sure that you carry the permission with you. Permission slips are available at ncwildlife.org on the trout page.

Also report any damage to gates or fencing that you see to the local landowner, and pick up any trash you might encounter while on stream. Lastly, if you see what you believe might be illegal activity like poaching, report the matter to the Wildlife Commission by calling (800) 662-7137. Last but not least, if you do encounter someone that seems agitated by your fishing or threatens you; contact your local law enforcement officials. Keep your cool, and remember you're only there to slug it out with the fish.

Beau Beasley (www.beaubeasley.org) is an award winning conservation writer and author of Fly Fishing Virginia *and* Fly Fishing the Mid-Atlantic. *He is known for his thorough research and impartial coverage of difficult river access and use issues across the country. This is his first contribution to WINC.*

KNOW BEFORE YOU GO

Here are eight tips of things you should know:

- It is complicated; angling access along private lands is a complex issue.
- Prepare for your trip by researching rules and regulations.
- Always respect private property and a landowner's generosity.
- Pick up trash.
- Do not block gates.
- Park in appropriate spaces.
- Utilize appropriate access points and trails only.
- If posted against trespass or you are unsure of access, always obtain landowner permission.

Additional information for landowners and anglers may be found at the commission's website, ncwildlife.org, on the trout page. Also at ncwildlife.org, anglers may find maps of trout fishing locations throughout western North Carolina, as well as stocking updates by county and date for Hatchery Supported and Delayed Harvest streams, a copy of the North Carolina Trout Management Plan and trout fishing regulations.

With names like *needle*, *dagger*, and *bayonet*, there's no doubt that these plants are

Strong and Tough: Yucca

written by Buffy Silverman / illustrations and nature activity by Anne M. Runyon

Sun beats down on sandy dunes near the shore. Wind whips through dried grasses and blows salty air. What plant is tough enough to survive hot, dry days and grow in sand and rocky soil? Yucca!

Colonies of Spanish bayonets grow in the dunes.

SURVIVING ON THE DUNES

Three kinds of yucca plants live in North Carolina. The most common yucca, called Adam's needle, grows in dunes, in woods, along roadsides and in gardens. The tips of its leaves are as sharp as needles! The evergreen leaves grow in a circle close to the ground. Twisty white threads curl off the edges of the leaves.

Two other yucca plants also live on Carolina sand dunes and beaches. Spanish dagger grows into a small shrub. Clumps of sword-shaped leaves hang from its trunk. The spine-tipped leaves are sharp enough to prick your skin. But they are not as sharp as Spanish bayonet, another yucca shrub. Tiny teeth along the edges of Spanish bayonet leaves can cut like a knife.

Yucca leaves are as tough as the places where they live. Even with hot sun and salty breezes, yucca leaves don't dry out. Their thick waxy skin traps water. This waxy coat keeps them from losing too much water through evaporation. When rain falls, whorls of yucca leaves channel water to the roots below. Rain slides down the leaves and roots quickly take it up. The roots and thick leaves can store water and use it during dry spells.

Young Spanish bayonet

The Yucca giant skipper butterfly lays her eggs on an Adam's needle.

SPECIAL PARTNERS

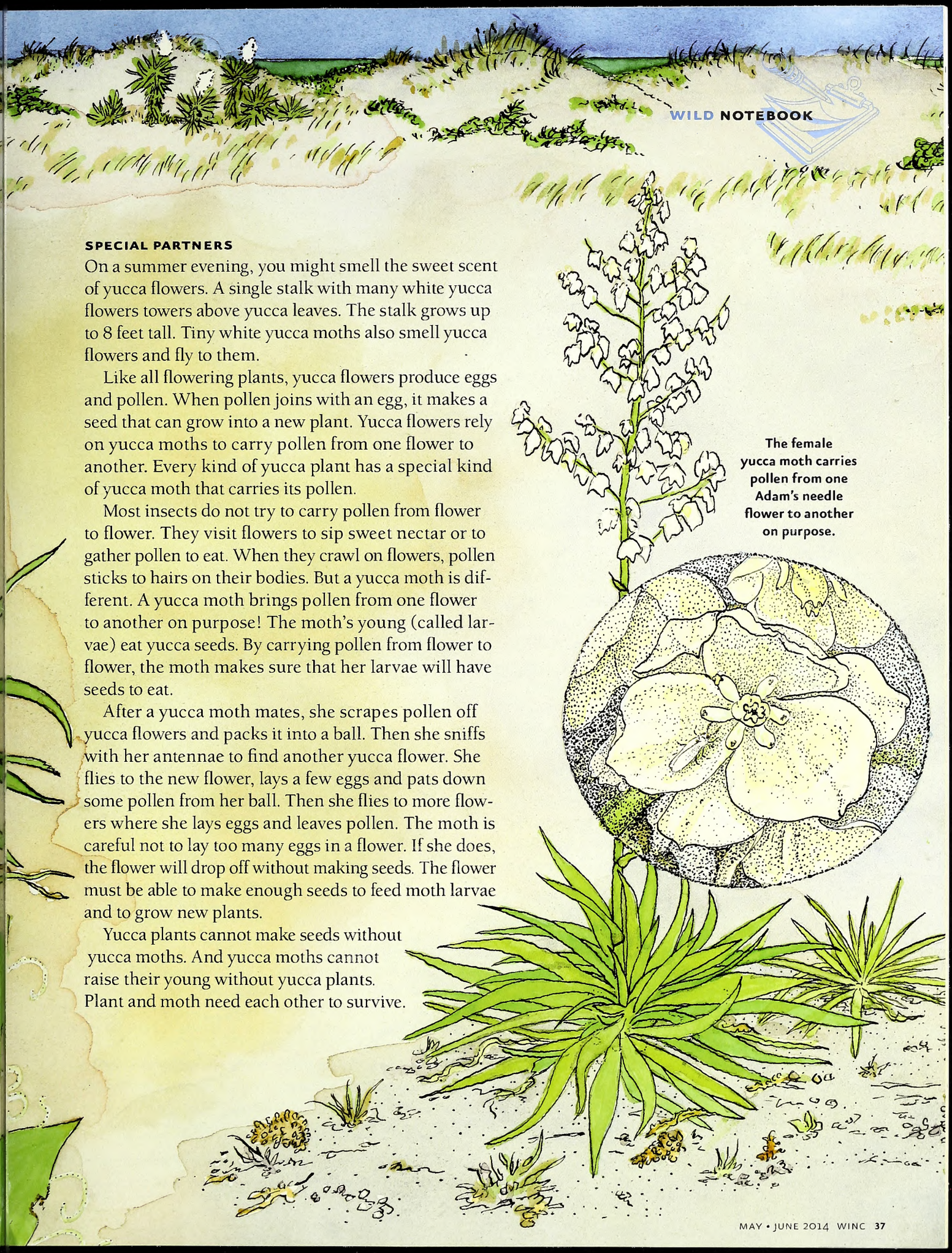
On a summer evening, you might smell the sweet scent of yucca flowers. A single stalk with many white yucca flowers towers above yucca leaves. The stalk grows up to 8 feet tall. Tiny white yucca moths also smell yucca flowers and fly to them.

Like all flowering plants, yucca flowers produce eggs and pollen. When pollen joins with an egg, it makes a seed that can grow into a new plant. Yucca flowers rely on yucca moths to carry pollen from one flower to another. Every kind of yucca plant has a special kind of yucca moth that carries its pollen.

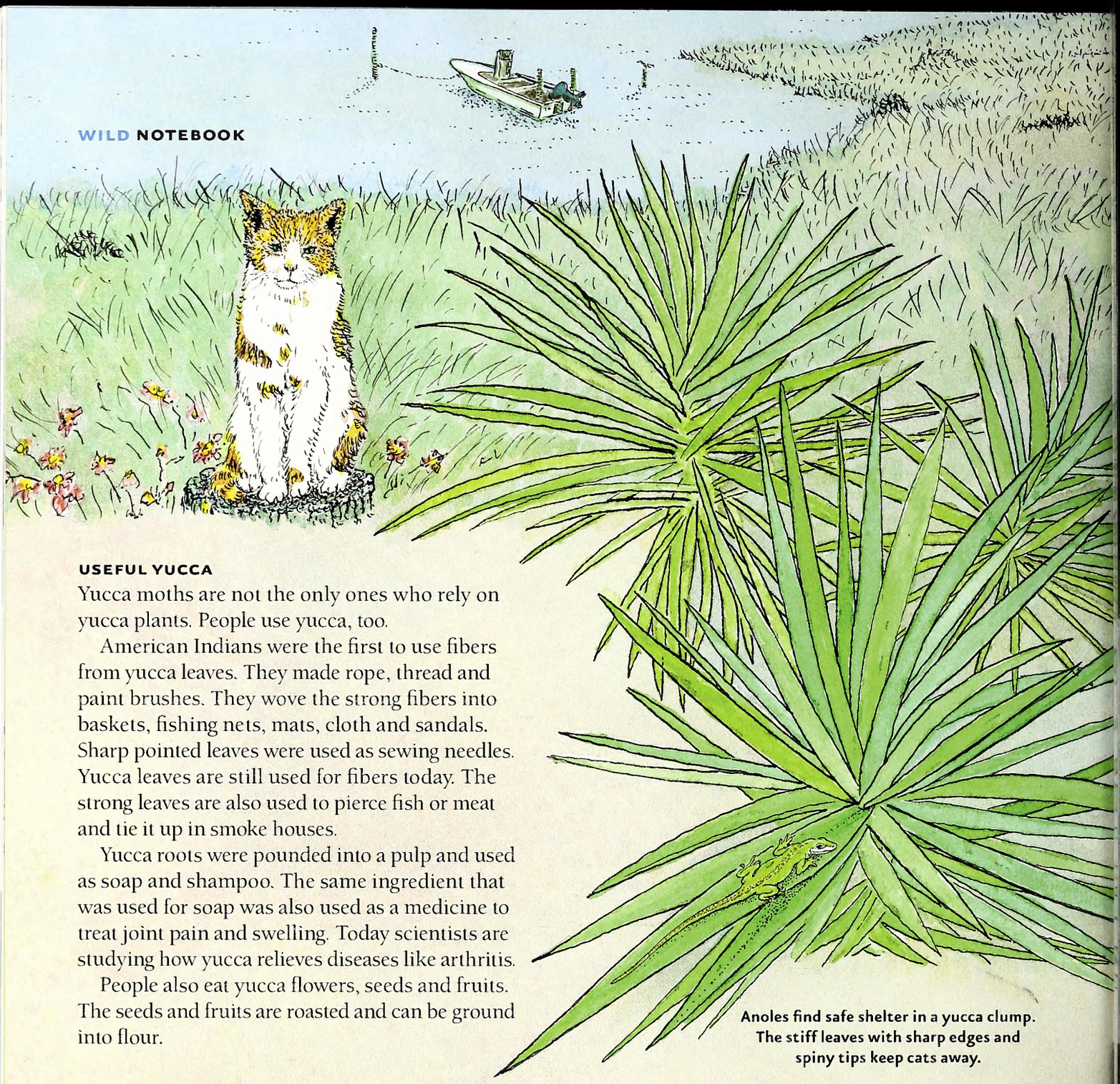
Most insects do not try to carry pollen from flower to flower. They visit flowers to sip sweet nectar or to gather pollen to eat. When they crawl on flowers, pollen sticks to hairs on their bodies. But a yucca moth is different. A yucca moth brings pollen from one flower to another on purpose! The moth's young (called larvae) eat yucca seeds. By carrying pollen from flower to flower, the moth makes sure that her larvae will have seeds to eat.

After a yucca moth mates, she scrapes pollen off yucca flowers and packs it into a ball. Then she sniffs with her antennae to find another yucca flower. She flies to the new flower, lays a few eggs and pats down some pollen from her ball. Then she flies to more flowers where she lays eggs and leaves pollen. The moth is careful not to lay too many eggs in a flower. If she does, the flower will drop off without making seeds. The flower must be able to make enough seeds to feed moth larvae and to grow new plants.

Yucca plants cannot make seeds without yucca moths. And yucca moths cannot raise their young without yucca plants. Plant and moth need each other to survive.



The female yucca moth carries pollen from one Adam's needle flower to another on purpose.



Anoles find safe shelter in a yucca clump. The stiff leaves with sharp edges and spiny tips keep cats away.

USEFUL YUCCA

Yucca moths are not the only ones who rely on yucca plants. People use yucca, too.

American Indians were the first to use fibers from yucca leaves. They made rope, thread and paint brushes. They wove the strong fibers into baskets, fishing nets, mats, cloth and sandals. Sharp pointed leaves were used as sewing needles. Yucca leaves are still used for fibers today. The strong leaves are also used to pierce fish or meat and tie it up in smoke houses.

Yucca roots were pounded into a pulp and used as soap and shampoo. The same ingredient that was used for soap was also used as a medicine to treat joint pain and swelling. Today scientists are studying how yucca relieves diseases like arthritis.

People also eat yucca flowers, seeds and fruits. The seeds and fruits are roasted and can be ground into flour.

Get Outside

Wherever flowers grow, you can watch insect pollinators at work. Take paper and pencil and a camera to a garden. Sit quietly near flowers and wait for insect action. Can you smell the sweet scents that flowers make to lure insects? Do you see insects with long straw-shaped mouths sipping nectar? Look for pollen sticking to hairs and fuzz on insect bodies. Watch as insects fly from one flower to another. Try to record what you observe or to photograph insects on flowers. If yucca flowers bloom where you live, you might find tiny moths flying from flower to flower in a summer evening.

Read and Find Out

- "Eyewitness Plant" by Davie Burnie, DK Publishing, 2011.
- "More Than Moccasins: Kid's Activity Guide to Traditional North American Indian Life" by Laurie Carlson, Chicago Review Press, 1994.
- "Night Life of the Yucca" by Katherine B. Hauth, Roberts Rinehart Publishers, 2006.
- "North Carolina's Amazing Coast: Natural Wonders from Alligators to Zoea" by David Bryant, George Davidson, Terri Hathaway, and Kathleen Angione, University of Georgia Press, 2013.
- "Strange Plants" by Katharine Kenah, Carson-Dellosa Publishing, 2013.

Find out more about Project WILD Workshops and literature at the Wildlife Commission's website at ncwildlife.org

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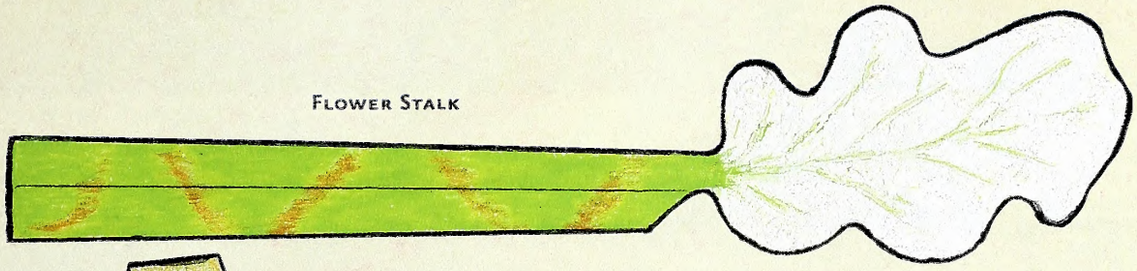
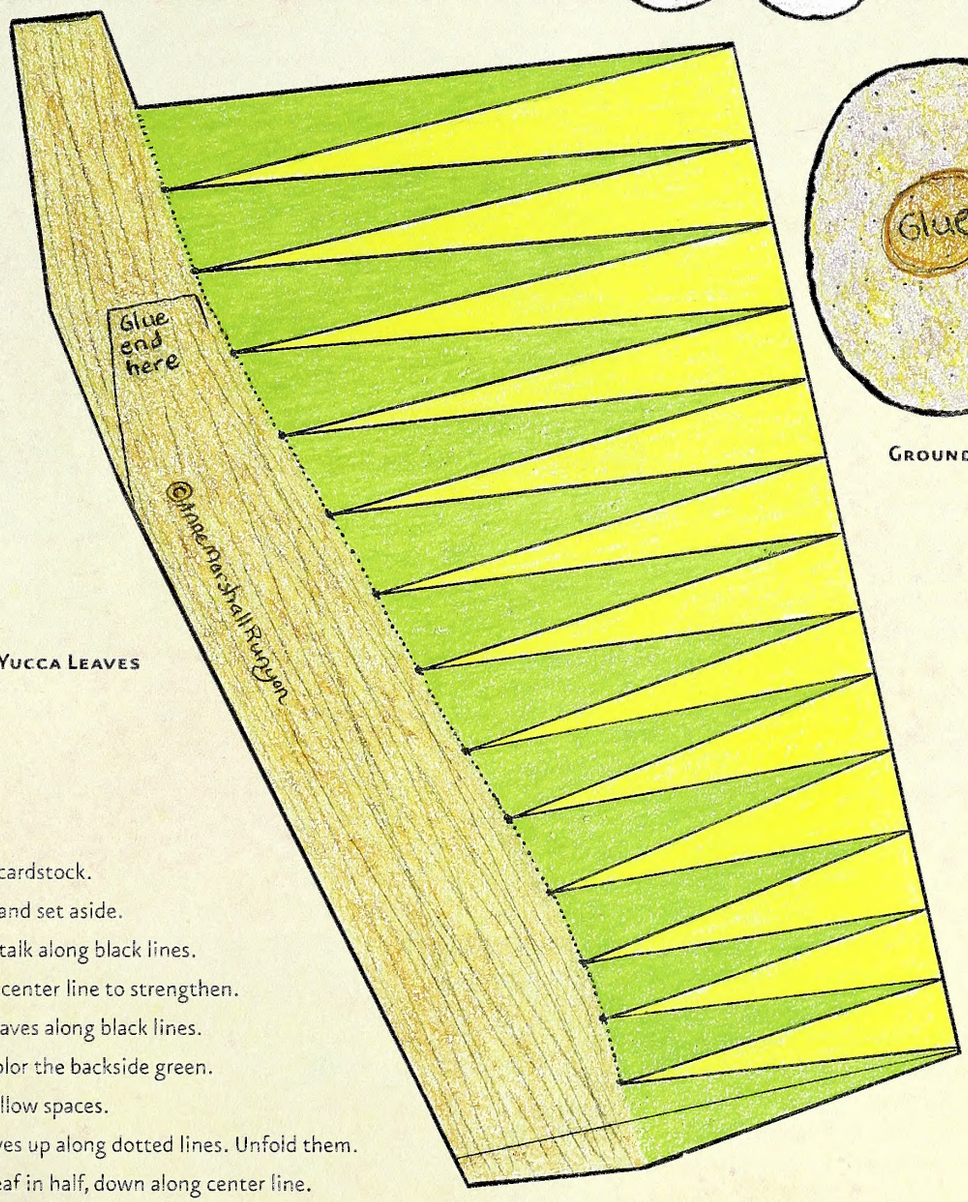
Make a Yucca Plant Paper Sculpture





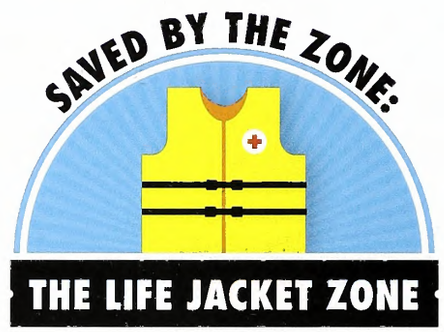
1) Copy design on cardstock.
2) Cut out ground and set aside.
3) Cut out flower stalk along black lines.
4) Fold stalk down center line to strengthen.
5) Cut out yucca leaves along black lines.
6) Turn over and color the backside green.
7) Cut away the yellow spaces.
8) Fold first 13 leaves up along dotted lines. Unfold them.
9) Fold last small leaf in half, down along center line.
10) Roll the leaves around a pencil. Remove pencil.
11) Adjust roll and glue end in place.
12) Hold brown stem and gently fold down 13 leaves.(Begin with bottom leaf.)
13) Poke stalk in middle of leaves. Grasp stalk and top leaf.
14) Turn to fan leaves apart, and glue yucca to ground.

back porch

NEWS *and* NOTES

Edited by Mike Zlotnicki

Saved by the Zone: The Life Jacket Zone



Wearing a personal flotation device while boating may be the single best step you can take toward safety. It is simple, easy and in the case of kids younger than 13, required by law.

Personal flotation devices (PFDs) are more commonly referred to as "life jackets" or "life vests." As a reminder to boaters to wear one, no matter what you call it, the U.S. Army Corps of Engineers has created a campaign that will see "Life Jacket Zone" stencils painted at boat ramps across the country. Social media promotions, contests for kids and other events are planned.

"We're excited about the 'Saved by the Zone: the Life Jacket Zone' safety campaign," said Carmen Boyette, park ranger with the Wilmington District of the U.S. Army Corps of Engineers. In North Carolina, this is a cooperative effort we've undertaken with Wildlife Resources Commission, State Parks and the U.S. Coast Guard Auxiliary, along with The Neuse Riverkeeper Foundation and Safe Kids Wake County."

Drowning was the reported cause of death in almost three-fourths of all boating fatalities, according to the National Safe Boating Council. Of those, 88 percent were reported as not wearing a PFD.

"Most people who drown in a boating accident had a life jacket available, but they were not wearing it when they entered the water," said Maj. Chris Huebner, a wildlife officer who is the state boating safety coordinator. "Accidents happen quickly. Too often, there isn't time or you are unable to locate a life vest and put it on."

State law requires children younger than 13 to wear an appropriate PFD whenever they are on a recreational vessel that is under way. It must be U.S. Coast Guard approved and be a proper fit, with youth sizes corresponding to weight. The law also requires all personal watercraft riders and anyone being towed to wear proper life vests. All recreational vessels must have a proper PFD of a suitable size for each person aboard and each skier being towed.

There are some exemptions to PFD requirements worth noting. The Wildlife Commission in August 2013 exempted surfboards, tubes, swimming rafts and inflatable toys from the requirement to carry a PFD. Also, manually propelled vessels that are recognized by national and international racing associations for use in competitive racing and in which all occupants row, scull, or paddle, with exception of a coxswain, if one is provided, and are not designed to carry any equipment not solely for competitive racing such as racing shells, rowing sculls, racing canoes and racing kayaks, are exempt from requirements for any type of PFD.

More information on Saved by the Zone at saw.usace.army.mil/ and info on boating safety, requirements and regulations is available at ncwildlife.org.

e NEWSLETTER

Get N.C. Wildlife Update—news including season dates, bag limits, legislative updates and more—delivered to your Inbox from the N.C. Wildlife Resources Commission. Sign up at ncwildlife.org/enews.

New Trails to Hike

Hikers interested in trails near the Blue Ridge Parkway now have three new trails to explore, thanks to a partnership involving private citizens, The Conservation Fund, the Southern Appalachian Highlands Conservancy and the N.C. Wildlife Resources Commission.

The three trails wind through Wildlife Commission game lands in western North Carolina—the Rose Creek Trail and Little Table Rock Mountain Trail on Pisgah Game Land and the Saddle Mountain Trail on Mitchell River Game Land. The Rose Creek Trail is a 1.3-mile loop trail that is rated easy. The Little Table Rock Trail is a straight 2.1-mile trail that provides a moderate hiking challenge, particularly if hikers plan for a 4.2-mile round trip. The Saddle Mountain Trail is a 2-mile loop trail that is rated moderate.

The trails are accessible from the Blue Ridge Parkway or nearby access roads on Commission game lands. Wildlife Commission staff marked trail heads with stone markers, as well as informational and directional signs.

The Rose Creek Trail is part of the Overmountain Victory National Historic Trail that follows the route taken by Patriot militia when they crossed the mountains on foot and horseback in late September 1781 on their way to defeat British-led forces at Kings Mountain. The trail generally follows Little Rose Creek for much of its length through oak and cove forests. The Little Table Rock Trail also winds through oak and cove forests, but the summit offers multiple views of different natural landmarks.

The Saddle Mountain Trail goes through oak and mixed oak-pine forests that also feature a dense understory of mountain laurel along much of the route.

Because the three trails are located on game lands, it is recommended that hikers wear a blaze orange garment during hunting seasons: September–February and April–May.

Partnerships involving state government, non-governmental organizations and private citizens made the trails possible, according to Gordon Warburton, mountain area ecoregion supervisor for the commission.

Warburton credited Fred and Alice Stanback and other private citizens, along with The Conservation Fund, Southern Appalachian Highlands Conservancy, Piedmont Land Conservancy, Natural Heritage Trust Fund, Clean Water Management Trust Fund and Ecosystem Enhancement Program for funding different parts of the land purchases, trail construction and trailhead markers.

The land acquisition for the three trails incurred an expense of almost $9 million. Funding sources for the project included private, non-government organizations, government agencies and landowners who donated property to the project.

The Stanback Trails are family-friendly trails designed for casual hikers. The trails, which are easy to moderate, are well-marked and accessible from game lands roads or directly from the Blue Ridge Parkway. More information: appalachian.org/community/stanbacktrails.html. For maps of game lands in western North Carolina, go to ncwildlife.org/Hunting/WheretoHunt/PublicPlaces/mountainGameLandMaps.aspx.

NCWRC

IN SEASON

In May and June, these seasons are open in North Carolina:

Wild Turkey (male or bearded only): through May 10

Trout: June 7, beginning at 6 a.m., harvest is allowed on Delayed Harvest waters.

There is no closed season or bag limit for feral swine, coyote, groundhog, striped skunk, nutria and armadillo. There is an open season for taking beaver with firearms or bow and arrow during any other open season for the taking of wild animals.

Check the latest *North Carolina Inland Fishing, Hunting and Trapping Regulations Digest* for bag limits and applicable maps or visit ncwildlife.org.

Zebulon's Perry Appointed to Board

MIKE ZLOTNICKI/NWRC

The North Carolina State Chapter of the National Wild Turkey Federation has announced that Bryan Perry has been elected as a member of the NWTF National Board of Directors. Elected by the membership of this national conservation and hunting organization, Perry began his three-year tenure at the February 2014 NWTF National Convention in Nashville, Tenn.

Perry, a Diamond Life Member and a 2012 Roger Latham Award winner, has served eight years on the North Carolina state board, the last four as state president. During his tenure as state chapter president, North Carolina funded over $300,000 on public game lands acquisitions, habitat improvement and NWTF Outreach programs. He also currently serves on the North Carolina Legislature's Sportsmen's Caucus Advisory Council.

CALENDAR OF EVENTS

Saturday, May 3

The 40th Annual North Carolina Maritime Museum Wooden Boat Show features a variety of small wooden boats, historic vessels, nautical crafts, educational activities, boat models, traditional skills demonstrations and displays. The Wooden Boat Show takes place on the Beaufort waterfront at the North Carolina Maritime Museum and the Harvey W. Smith Watercraft Center located across the street from the museum. Admission is free. Go to ncmaritimemuseums.com for more information.

Tuesday–Thursday, May 27–29

The John E. Pechmann Fishing Education Center has scheduled a Basic Custom Rod Building Class from 6:30 p.m. until 9 p.m. each evening. The course is free of charge and all tools and materials are provided. Each student will build a 6-foot, medium-action spinning rod from an IM6 blank. Preregistration is required. The course will be limited to 15 students. Go to ncwildlife.org/Learning/EducationCenters/Pechmann.aspx for more information.

Friday–Saturday June 6–14

Big fish, big boats and big money are the rule for the week during the 56th Annual Big Rock Blue Marlin Tournament held on the waterfront in Morehead City. The fishing starts with the 17th Annual Keli Wagner Big Rock Lady Angler Event on Saturday and then the Big Rock commences with fishing Sunday through Friday. Daily weigh-ins are on the waterfront and free to the public. Go to thebigrock.com for more information and to follow the daily hook-up report and leaderboard.

Readers should check with the contact listed before traveling to an event. Items for listing should be conservation-oriented and should be submitted at least four months in advance to mike.zlotnicki@ncwildlife.org, or call 919-707-0175.

Changes Made in Bear Hunting Regulations

MELISSA McGAW/NCWRC

The N.C. Wildlife Resources Commission approved hunting regulations in February for 2014–15 that include establishment of a bear hunting season in the Piedmont and allowing the aid or use of unprocessed foods for bear hunting on private lands as long as the bear is not actually consuming the unprocessed foods.

The action came during the regularly scheduled Wildlife Commissioners' meeting to consider wildlife management, game lands and fishing regulations for the 2014–15 seasons. The adopted fishing and hunting regulations will take effect Aug. 1, 2014.

The adopted bear hunting proposals will help maintain a healthy bear population in North Carolina, according to Dr. David Cobb, the Commission's chief wildlife biologist. The recommendations were the direct result of the state's 10-year Black Bear Management Plan, which utilizes science-based decision making, biologically sound management principles and public input to guide the decision process.

For more information on North Carolina's black bears and hunting regulations, as well as bear research and management, go to ncwildlife.org/bear.

New Changes Approved for Hunting and Fishing

The N.C. Wildlife Resources Commission has approved changes to the state's wildlife management, game land and fishing regulations for the 2014–2015 season. These new regulations will take effect Aug. 1, 2014.

The Commission voted to adopt the regulation changes at its Feb. 27 business meeting in Raleigh.

The proposals were approved as presented at the public hearings with several exceptions. Text to five proposals was amended, one proposal was disapproved, and three proposals were removed from consideration. The amended proposals were:

- A hunting proposal (H-8) that removes Alexander, Catawba, Iredell, Stokes and Yadkin counties from the list of counties where hunting bear with dogs is prohibited;
- A hunting proposal (H13) that will allow deer and bears to be taken with any type of handgun and ammunition, replacing the words "except body armor-piercing projectiles will be prohibited" with "unless otherwise prohibited by law."
- A game land proposal (G2) that will add bear to the approved regulation that makes the Lick Creek tract of Alcoa Game Land in Davidson County an archery-only area for deer hunting.
- A game land proposal (G6) that will allow hunting deer with dogs on Stones Creek Game Land in Onslow County on Tuesdays, Thursdays and Saturdays, not Tuesdays, Thursdays and Fridays.
- An inland fishing proposal (F2) that will designate a half- mile of the West Fork Pigeon River in Haywood County below Lake Logan as a Public Mountain Trout Waters, classified as Wild Trout Waters, and not Catch and Release/Artificial Lures Only Trout Waters.
- A proposed game land regulation (G4) to designate Holly Shelter Game Land as a six-day-per-week game land and allow dog hunting for deer and bear on certain days of the week was disapproved.

What Is An Aigrette?

written by Clyde Sorenson
illustrated by Jim Brown

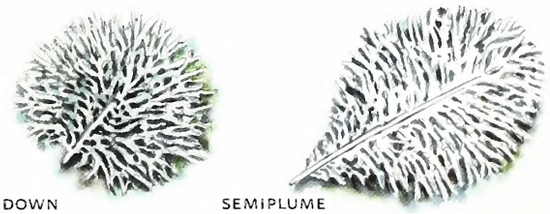
NORTH AMERICAN HERONS AND EGRETS were nearly hunted to extinction for the filmy, elegant plumes the birds develop during mating season. These feathers, called aigrettes, are used by the birds in their mating and pair-bonding displays. Herons and egrets have several other kinds of feathers in addition to the ones that almost got them wiped out.

CONTOUR FEATHERS

The feathers that define the bird's shape and provide its aerodynamic fairing are called contour feathers. Those on the body have a central rachis (the shaft), with a web on either side. Most of these have a small downy section near the bottom. Feathers don't grow evenly over the body, but rather in defined tracts on the bird's skin.

FLIGHT FEATHERS

The big, stout, stiff feathers that propel the bird through the air and help it navigate are special contour feathers called "flight" feathers. Those on the wing are the remiges, those in the tail, the rectrices.



Under the contour feathers are fluffy down and semiplume feathers that provide insulation. Down is most developed in birds that live in very cold climates or spend a lot of time in and under the water.

The bird also has numerous hair-like filoplumes scattered about. These extend into the contour feathers and are sensory in function — they transmit movements at the surface of the contour feathers to the skin.

POWDER DOWN

Herons, unlike most other birds, also have well-developed patches of very unfeather-like feathers called powder down. These feathers grow continuously, like a turkey's beard, but pretty much disintegrate as they grow into a fine, waxy dust that the bird combs into and on its plumage. Herons use this substance to clean fish slime and oils from their plumage; it gives their feathers a subtle, dusty bloom.

Fishing Every Stream

written by Jim Dean

In the early 1960s—full of youthful and obsessive exuberance—I entertained the notion that I would try to fish every trout stream in North Carolina. I also planned to someday fish countless high-quality trout waters across the continent, particularly the classic streams of the Northeast and American West. Worldwide venues also beckoned, and I gathered vast files of maps and references for such exotic spots as Alaska, New Brunswick, Patagonia, New Zealand, Tierra del Fuego, most of Europe and pretty much all of the Caribbean.

JIM DEAN

I was in my 20s and only vaguely aware of how such lofty goals were likely to be impacted by time, resources, health, family and quixotic reality. It won't surprise you to learn that I quickly became acquainted with the concept that life happens while you're planning something else.

The realization also slowly dawned upon me that fishing some 4,000 miles of streams in western North Carolina, many quite remote, was never going to be an achievable goal. To fish just one sizeable stream and all its tributaries would be a significant undertaking even if I did it only once. Besides, I learned that about half of the state's total trout mileage was privately owned by folks unlikely to be sympathetic to my quest.

"Obsession may diminish over time, but it doesn't deteriorate as quickly as your knees."

Even so, I fished as often as I could, and my boots were rarely completely dry. I made pilgrimages to fish the more than two-dozen public streams that were then under native or trophy regulations administered by the Wildlife Resources Commission, and added most of those in the Great Smokies and along the Blue Ridge Parkway. And, naturally, I returned many times to fish my favorites. I also explored many lesser-known streams, and even occasionally had opportunities to fish some prime private waters.

More than five decades have flown by since those early days of frantic fishing, and over the years, some of my more ambitious and impractical dreams have flown with them. Those glorious global goals have steadily shrunk until they are not much above the size of a walnut. And this is true even on what I regard as my home waters—Wilson, Lost Cove, Harper, Steele and Upper creeks—which lie in the old Daniel Boone Refuge part of Pisgah National Forest.

I have fished all of these creeks many times from bottom to top, and also every tributary with a trickle big enough to hold a trout. Show me a photo taken on any stretch, and I can identify the stream and often the exact pool or riffle where that photo was taken. And, unless you cut me off (a good idea), I will relate details on the size and numbers of trout caught or lost at that precise spot over the years, and may well drone on long after your eyes have glazed over (like now?).

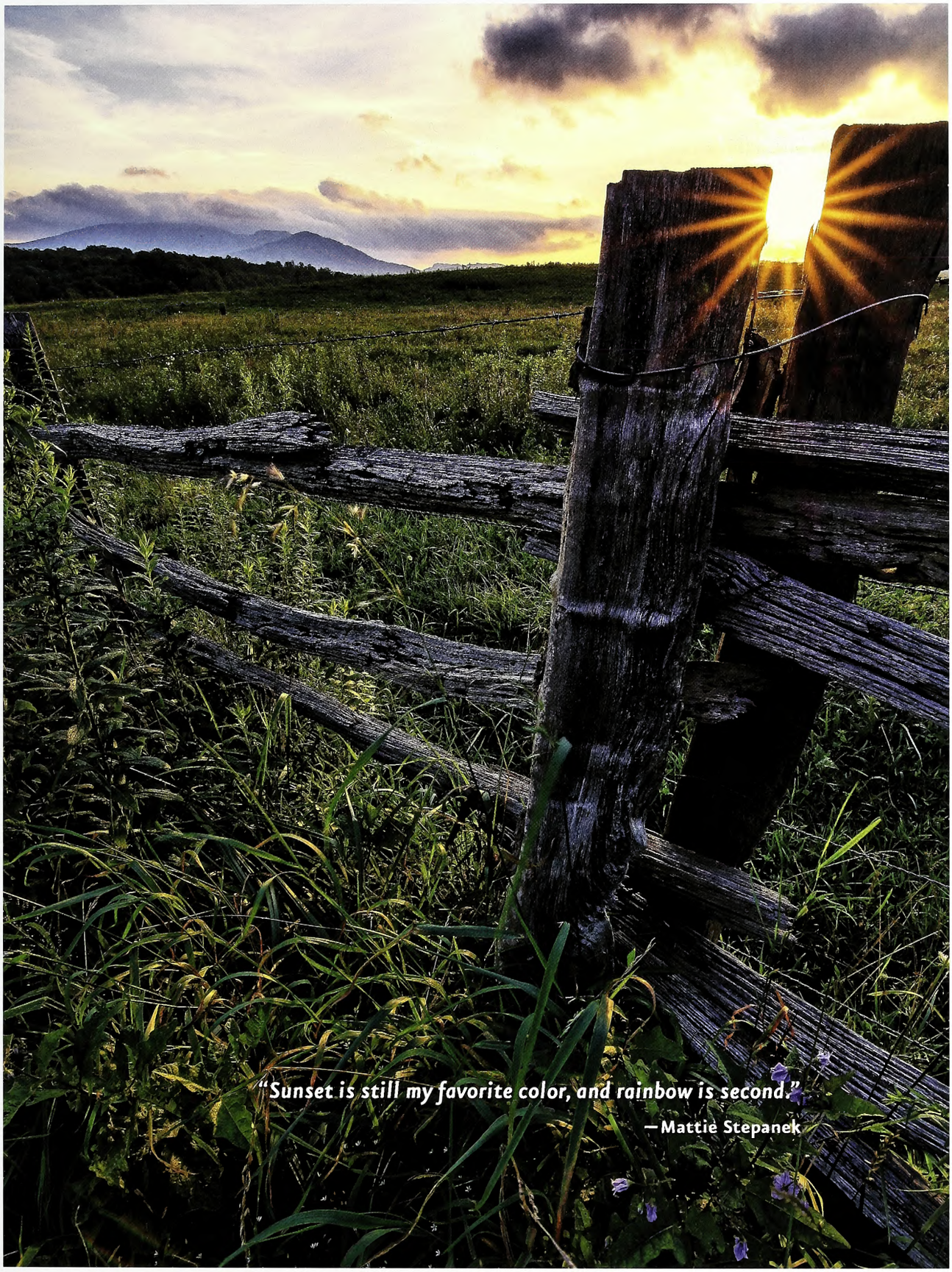
Obsession may diminish over time, but it doesn't deteriorate as quickly as your knees. That's okay because I find I am now perfectly content to more often revisit favorite old fishing spots that I particularly know and love. I'm very fortunate that I can still walk a reasonably steep trail and wade (albeit more slowly and carefully), but I do it less often, and I am always keenly aware that this might be the last time I'm physically able to do it.

Last fall on a magnificent October day, Tom Cooper and my son, Scott, and I hiked in and fished our favorite stream. I had not been on this particular stretch of water in several years, and I found that portions of the trails along the creek were grown over and strangely unfamiliar. But I caught trout in the same runs where I found them 50 years ago. And, glory be, I was not as "stove up" (sore and stiff) the next morning as I expected to be.

I used to think that it would bother me when my fishing days began to dwindle, but, oddly, that doesn't seem to be the case. I'm not as driven as I was, which means I choose to fish when the weather and other conditions are more nearly ideal, and I stick to places that I especially like. I make fewer adventurous forays into the unknown, and I go not simply to be going, but when my desire for the experience is strong. What I think I have learned is to compensate for naturally diminished zeal and capability by distilling the best of the essence, like a slow-simmered sauce reduction. It yields more satisfying flavor.

I have been fortunate to visit and fish quite a few of the places I once considered part of life's entitlement, but by no means all of them. Nor does it matter. I still spend some time each year chasing big, wild rainbows on the Henry's Fork in Idaho, and I can wade a bonefish flat, but I certainly don't regret giving up that silly business of fishing every creek in western North Carolina.

Methuselah, for Heaven's sake, didn't live long enough for that.



VICTOR ELLISON

Setting sun along the Blue Ridge Parkway

IN THE JULY · AUGUST ISSUE

MELISSA McGAW/NCWRC

DREAMS CAN COME TRUE
Since 2000, Terry Boyce and his team of volunteers at Dream Hunting and Fishing Program have been granting the wishes of children and young adults who want to hunt and fish, but need a little help along the way.

MODERN JERKBAITS
Jerkbaits may have had their beginnings nearly 80 years ago with the Rapala Original Floating Minnow, but the field today is filled with a slew of offerings.

PATIENT PREDATOR
The American alligator is an ancient, successful species that is experiencing a population growth in eastern North Carolina.

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